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Legal Control Efforts Against Illegal Buildings **on the Borders** **of the Pelayaran River**

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Abstract

Spatial planning in river border areas is an essential instrument for maintaining the ecological function of rivers and ensuring land use complies with applicable laws and regulations. However, the implementation of legal control over illegal buildings along the Pelayaran River border in Karangtowo Village, Demak Regency, continues to face

various obstacles, preventing effective enforcement. This study aims to analyze the implementation of legal control over illegal buildings based on the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 and to identify the factors hindering its effectiveness. This research employed an empirical juridical method with a qualitative approach. Data were collected through field observations, interviews with relevant government agencies and local communities, and a review of legislation and related literature. The findings indicate that legal control has not been implemented optimally. Normatively, the Pelayaran River is classified as an urban river without embankments, requiring a minimum river border distance of ten meters from both sides of the riverbank. Empirically, approximately seventy semi-permanent buildings are still used for commercial purposes, with several structures extending into the river channel, violating the Ministerial Regulation. This condition reflects a gap between *das sollen* and *das sein* in spatial control implementation. Major obstacles include low public legal awareness, ineffective public outreach, the high economic value of the river border area, and increasing commercial activities driven by nearby industrial development. Strengthening institutional coordination, continuous monitoring, and community empowerment are therefore necessary to restore the river border's protective function sustainably.

Keywords

Legal Control, Illegal Buildings, River Boundaries, Shipping Rivers, PUPR Ministerial Regulation Number 28/PRT/M/2015.

Introduction

Spatial utilization is a crucial aspect of national development, maintaining a balance between development interests, community interests, and environmental sustainability. Good spatial planning is not only oriented toward economic spatial utilization but also ensures the continued function of protected areas, including riverbanks. Riverbanks serve a strategic function as river protection areas, aiming to maintain water flow capacity, control flooding, prevent erosion, and maintain ecosystem balance. Therefore, every form of spatial utilization in riverbank areas must be carried out in accordance with statutory provisions to ensure the river's function is maintained.

In implementing spatial planning, the government has made efforts to achieve orderly spatial utilization through spatial control policies. Conceptually, efforts are a series of actions carried out in a planned, systematic, and continuous manner to achieve certain goals. These efforts can be said to be optimal if their implementation is able to achieve predetermined targets effectively, resulting in conditions in accordance with the policy objectives. Conversely, an effort is said to be suboptimal if its implementation still faces various obstacles so that the expected goals are not fully achieved. Therefore, the optimality of spatial planning, or

suboptimality of an effort can be seen from the level of community compliance with spatial planning provisions, the effectiveness of government oversight, inter-agency coordination, and success in maintaining the function of protected areas.

According to Joseph S. Roucek, social control *is* a process that can take place in a planned or unplanned manner, which aims to educate, direct, persuade, and even force members of society to comply with prevailing social rules, norms, and values. Thus, social control is not only carried out through repressive measures, but also through preventive efforts in the form of guidance, socialization, and education to shape community behavior in accordance with prevailing norms.¹

Based on this definition, social control *can* be understood as a form of oversight carried out by individuals, groups, or institutions on the behavior of community members to ensure they act in accordance with applicable norms, values, and regulations. The primary goal of social control is to create an orderly, harmonious, and conducive community life through compliance with regulations, thereby creating a social order that aligns with shared expectations.

Control can be preventive or repressive. Preventive control is an effort taken before a violation occurs with the aim of preventing deviations from norms or regulations. This form of control emphasizes guidance, outreach, education, counseling, warnings, and supervision. Repressive control, on

¹ Soeryono Soekanto, *Principles of Legal Sociology*. Pt. Raja Grafindo Persada, Jakarta, 1988, p. 158

the other hand, is an action taken after a violation has occurred with the aim of stopping the violation and restoring order in accordance with applicable regulations. This control usually takes the form of law enforcement or sanctions.

Thus, spatial planning control is one of the important stages in the implementation of spatial planning which aims to ensure that the use of space is in accordance with the spatial plan through various instruments, such as zoning regulations, permits, supervision, provision of incentives and disincentives, and enforcement of sanctions against violations of spatial use. In river border areas, spatial planning control not only aims to prevent the emergence of buildings that are not in accordance with the spatial designation, but also maintains the function of the river as a protected area that has ecological, social, and economic value.

One of the areas facing this problem is Karangtowo Village, Karangtengah District, Demak Regency, which is crossed by the Pelayaran River. Based on the provisions of the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 concerning the Determination of River and Lake Boundary Lines, the river boundary area is a space that must be protected from activities that have the potential to disrupt the function of the river, including the construction of buildings without regard to the provisions of the boundary line. However, empirical conditions show that the existence of illegal buildings along the Pelayaran River boundary until now has not been optimally controlled so that the existence of these buildings remains one of the problems in the management of the river boundary area.

This phenomenon is reflected in the government's efforts to normalize the Pelayaran River. As reported by Lingkarjateng.id on July 4, 2025, "*Normalization of the Pelayaran Demak River Considered a Solution to Flooding.*"

²The Central Java Provincial Government, in collaboration with the Pemali Juana River Basin Office (BBWS), is normalizing the Pelayaran River through dredging to address river siltation and reduce the risk of flooding. The normalization program aims to restore the river's capacity, improve water flow, and support irrigation for agricultural land in Demak Regency. Successful river normalization requires a riparian zone free from obstructions such as buildings, allowing heavy equipment to operate optimally and restoring the river's function.

However, conditions after the normalization process have shown that spatial planning efforts to control illegal buildings have not yet achieved the desired results. This is based on documentation published on the Instagram account @demakberdikari, which includes the caption "*Demak River Under Building Pressure.*"³ On January 10, 2026, buildings were still visible along the Pelayaran River, used for business and economic activities. This documentation shows that the presence of buildings in the riverbank area is still an ongoing phenomenon, even though the government has implemented

² Sekar Sari. (July 4, 2025), "Normalization of the Demak Pelayaran River Considered a Solution to Overcoming Floods", Lingkarjateng.Id, <https://Lingkarjateng.Id/Normalisasi-Sungai-Pelayaran-Demak-Dinilai-Jadi-Solusi-Atasi-Banjir/>

³ Umi Lanisti. (January 10, 2026), "Demak River Under the Pressure of Buildings". @Demakberdikari. https://www.instagram.com/p/Dtt8ej2e81_/?utm_source=ig_web_copy_link&igsh=Mzrlodbinwflza==

a river normalization program. This condition indicates that the implementation of spatial planning control based on the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015 has not been running optimally because there are still uses of space that are not in accordance with the function of the riverbank area.

The presence of illegal buildings in the Pelayaran River riparian area has various impacts on the environment and spatial planning. From an environmental perspective, buildings located on the riverbank jut out into the river by approximately 50 cm – 1 m, increasing the potential for household and business waste to be dumped into the river, both intentionally and unintentionally, thereby reducing the quality of the aquatic environment. Furthermore, community activities in the riparian area can accelerate sedimentation, narrow the river flow space, and disrupt the river's hydrological function in discharging water discharge. As a result, the goals of flood control, riparian protection, and orderly spatial utilization cannot be optimally realized.

Efforts to control illegal structures along shipping riverbanks face several obstacles. These obstacles impact both the optimal and suboptimal implementation of supervision of spatial planning along shipping riverbanks. One such obstacle is low public legal awareness, with some residents using these structures as business locations and having high economic value, making them reluctant to halt the massive construction of these structures. This is not only a societal issue, but also the suboptimal oversight by authorized agencies. Supervision requires consistent continuity, but the lack of effective and ongoing warnings and outreach has

resulted in suboptimal efforts to control the use of illegal structures along shipping riverbanks.

The river boundary line has the aim of ensuring that the function of rivers and lakes is not disturbed by activities that develop around them with utilization activities and efforts to increase the value of the benefits of existing resources in the river can provide optimal results by limiting things that interfere with the destructive power of the river such as controlling the use of space against illegal buildings on the river boundary shipping. This objective is clearly stated in article 3 paragraph 2 of the Minister of PUPR Regulation number 28 of 2015 concerning the determination of river and lake boundary lines.⁴

The Pelayaran River in Karangtowo Village is a river that does not have a dike and is located in an urban area, and is adjacent to the Pantura Demak-Semarang Road. These characteristics make the river boundary area have an important function as a river protection space as well as controlling the use of the surrounding space. Therefore, the determination of the river boundary line must refer to the applicable provisions. Based on Article 5 of the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 concerning the Determination of River and Lake Boundary Lines, the boundary line on rivers that do not have dikes in urban areas with a riverbed depth of less than 3 (three) meters is set at a distance of at least 10 (ten) meters

⁴ Indonesia 2015. Article 3 Paragraph 2 of the Regulation of the Minister of Public Works and Public Housing Number 28/Prt/M/2015 Concerning River Boundary Lines and Lake Boundary Lines. State Agency 2015 Number 772.

from the left and right edges of the riverbed along the river channel.⁵

Several previous studies provide support and a conceptual basis for understanding the problem of spatial utilization in river boundary areas, including research by Alsa, B., Priyambodo, D., & Dinda, G. (2023). *Implementation of Government Policies in Watershed Management Regarding Land Use Change Activities: Implementation of Government Policies in Watershed Management as a Result of Land Use Change*).⁶ This research focuses on reviewing government policies related to watershed management (DAS) in response to land use changes that have resulted in the destruction of watershed ecosystems in Central Java. The authors highlight that the increasing demand for land for housing, industry, and infrastructure has driven large-scale land clearing, resulting in flooding, drought, sedimentation, and reduced water quality.

Furthermore, research by Salsabila, N. (2025). *Analysis of Government Responsibility in Enforcing Riverbank Regulations (Case Study: Bringin Riverbank, Wonosari Village, Ngaliyan District, Semarang City)*.⁷ The research focuses on the study of the factors underlying the formation

⁵ Indonesia 2015. Article 5 Paragraph 1 of the Regulation of the Minister of Public Works and Public Housing Number 28/Prt/M/2015 Concerning River Boundary Lines and Lake Boundary Lines. State Agency 2015 Number 772.

⁶ Alsa, B., Priyambodo, D., & Dinda, G. (2023). *Implementation of Government Policies in Watershed Management as a Result of Land Use Change*. Legal Reform, 27(1), pp. 1-11.

⁷ Nadia Salsabila” *Analysis of Government Responsibility in Enforcing River Boundary Regulations (Case Study: Bringin River Boundary, Wonosari Village, Ngaliyan District, Semarang City)*, (2025) Vol.2 Number 1. Pages: 33-34 <https://doi.org/10.15294/Lsr.V5i1.25036> .

of violations in the riverbank area and the implementation of the responsibility of law enforcement officers in enforcing requirements related to river boundaries in the Bringin River, Wonosari Village, Semarang City. The research results show that if the violation is influenced by various aspects, including historical aspects, the legal status of land rights, the economic conditions of residents, lack of socialization, limited land availability, and weak supervision from the authorities. In addition, this study also examines the role of BBWS and local governments in the process of law enforcement against riverbank violations.

Based on these two studies, it can be seen that previous studies have focused more on the implementation of river basin management policies and law enforcement against river boundary violations. However, this study has a different focus, namely analyzing spatial planning control efforts against illegal buildings on the Pelayaran River border through the implementation of the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015 in Karangtowo Village, Demak Regency. This study not only examines the form of control carried out by the government, but also evaluates the level of optimality of policy implementation, factors that hinder spatial planning control, and its relationship to the presence of illegal buildings that are still found after the implementation of the Pelayaran River normalization program. Thus, this study is expected to provide new contributions to the development of spatial planning law studies, particularly regarding the implementation of spatial use control in river boundary areas.

This research uses a qualitative approach. Lexy J. Moleong defines a qualitative approach as aiming to understand the phenomena experienced by the research subjects comprehensively.⁸ The type of empirical juridical methodology research is a method that examines applicable legal regulations and how they are applied in reality in society.⁹ This type of research is relevant because the focus of this research is to understand the implementation of certain legal regulations and their impact on society and the social environment in certain areas. Therefore, by using this type of empirical juridical research, it can identify a comprehensive understanding regarding the dynamics of regulations, emerging obstacles, impacts on society, and the effectiveness of legal implementation. Supported by primary legal materials are legal materials consisting of statutory regulations, official minutes, court decisions, official state documents. Secondary legal materials consist of books or journals containing basic principles / legal principles, expert views, legal research results, and interviews with informants, observations.

This study proves that there is still a conflict between *das sollen* and *das sein* for the government and stakeholders in carrying out the mandate of the Minister of PUPR Regulation Number 28/PRT/M/2015 concerning the determination of river and lake boundary lines in spatial planning control of illegal buildings on shipping river boundaries that have not been implemented optimally. Although the government has made various efforts, such as

⁸ Bambang Sunggono, 2006, Legal Research Methodology, Pt Rajagrafindo Persada, Jakarta. Pages: 48-51.

⁹ Mukti Fajar Nd. Yulianto Achmad, MH, 2015, Dualism, Normative and Empirical Legal Research. Student Library. Yogyakarta. Page 38.

river normalization through sedimentation dredging, in reality, illegal buildings are still found that utilize river boundary areas as business places and economic activities.

¹⁰This condition shows a gap between normative provisions and implementation in the field which is influenced by various factors, including low legal awareness of the community, high economic value of the area, less than optimal supervision, and less effective socialization and coordination between agencies. As a result, the function of river boundaries as protected areas cannot be realized optimally as mandated in article 3 paragraph 2 of the Minister of PUPR Regulation Number 28/PRT/M/2015. Based on these conditions, this study examines how the implementation of spatial planning control efforts for illegal buildings on the Pelayaran River border is based on the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 in Karangtowo Village, Demak Regency?

A. Implementation of Illegal Building Control in the Sailing River Boundary Area Based on the Regulation of the Minister of Public Works and Public Housing Number

¹⁰ Anggraini, LR (2024). River Boundary Line Analysis (Case Study Along Pesanggrahan River, West Java) Meruyung Village, Limo District, Depok City, West Java). Umpak: Journal of Architecture and the Environment Guidance, 7(2), Pages: 10-18.

28/PRT/M/2015 in Karangtowo Village, Demak Regency

1. Norms and Criteria for River Boundary Lines in PUPR Ministerial Regulation No. 28/PRT/M/2015

Efforts are a series of actions carried out in a planned, systematic, and continuous manner to achieve certain goals. In the context of spatial planning, government efforts are realized through various policies aimed at directing, supervising, and ensuring that spatial utilization takes place in accordance with the provisions of laws and regulations. One form of this effort is spatial control, namely the process carried out to ensure compliance between spatial utilization and spatial plans through regulatory instruments, licensing, supervision, provision of incentives and disincentives, and enforcement of sanctions for any violations of spatial utilization.

According to Joseph S. Roucek, social control is defined as a process, whether planned or unplanned, that educates, encourages, and even forces citizens to comply with prevailing social norms and values. Therefore, social control is the supervision of other groups or individuals that directs the role of individuals or groups as part of society in order to create a social situation in accordance with social expectations, namely a compromising social life.¹¹

Control can be preventive or repressive. Preventive control is an effort taken before a violation occurs with the

¹¹ Soeryono Soekanto, *Principles of Legal Sociology*. Pt. Raja Grafindo Persada, Jakarta, 1988, p. 158

aim of preventing deviations from norms or regulations. This form of control emphasizes guidance, outreach, education, counseling, warnings, and supervision. Repressive control, on the other hand, is an action taken after a violation has occurred with the aim of stopping the violation and restoring order in accordance with applicable regulations. This control usually takes the form of law enforcement or sanctions.

A control effort can be considered optimal if all control instruments are implemented effectively so that the stated objectives can be achieved, such as increasing community compliance, maintaining the function of protected areas, and reducing violations of spatial utilization. Conversely, an effort is said to be suboptimal if its implementation still faces various obstacles so that the expected objectives cannot be achieved optimally. This condition can be demonstrated by the continued discovery of violations of spatial utilization, weak supervision, low public legal awareness, and ineffective coordination between agencies in implementing control.¹²

One form of spatial planning control is implemented in riverbank areas. Rivers are natural resources with strategic functions as water providers, irrigation systems, drainage systems, flood control systems, and ecosystem balance. Therefore, river protection is not only aimed at the river body itself, but also at the riverbank area, which serves as a protective and buffer zone for the ecosystem. The existence of riverbank areas is crucial for maintaining the river's ecological

¹² Farhan, Nurul, and Khairul Amri. "Regulation of Illegal Buildings on the Banks of the Sail River in Pekanbaru City." *Motekar: Multidisciplinary Journal of Technology and Architecture* 1, No. 2 (2023). Pages 10-15 <https://doi.org/10.57235/Motekar.V1i2.1208>

function and preventing land use that could potentially cause environmental damage.

Regulations regarding the protection of river boundary areas are regulated in the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 concerning the Determination of River and Lake Boundary Lines. Based on Article 1 number (1), a river is a water channel or container, whether formed naturally or engineered, which consists of a water flow network and the water bodies within it, from the upstream to the estuary and is limited by boundary lines on both sides. Furthermore, Article 1 number (10) explains that the river boundary line is an imaginary line along the left and right sides of the riverbed which functions as the boundary of the river protection area. Thus, the river boundary area is an inseparable part of the river management system which must be maintained so that its ecological, social, and spatial functions are maintained.

The presence of illegal buildings in riverbank areas represents a form of spatial use that is inconsistent with the function of protected areas. These buildings are generally constructed without regard to riverbank regulations, potentially disrupting the river's ecological function, narrowing water flow, and increasing the risk of pollution and hydrological disasters. Furthermore, the use of riparian areas for residential and business purposes indicates that areas that should have served as protected areas have been converted into areas with economic value for the community.

This phenomenon also occurs in the Pelayaran River area, particularly in Karangtowo Village, Karangtengah District, Demak Regency. Observations show that the

Pelayaran River's border area is still filled with illegal structures, both permanent and semi-permanent. These structures are used as residences, food stalls, shops, and various other businesses that have developed along the Semarang-Demak Pantura Road corridor. This situation indicates that the riverbank area is still being continuously utilized to support community economic activities, even though it is a space that must be protected.

In order to maintain the function of rivers, the government has established provisions regarding river boundary lines through the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 concerning the Determination of River and Lake Boundary Lines. Based on Article 3 paragraph (1), the determination of river boundary lines aims to: (a) ensure that the function of rivers and lakes is maintained and not disturbed by activities developing in the surrounding area; (b) support the optimal utilization and increase in the value of river resources while still paying attention to the sustainability of their function; and (c) limit and control the potential destructive power of river water on the surrounding environment.¹³ These provisions indicate that the determination of river boundary lines not only functions as an administrative boundary, but also as an instrument for controlling spatial planning to ensure the sustainability of river functions.

The implementation of river boundary line determination is carried out by considering the physical

¹³ Indonesia 2015. Article 5 Paragraph 1 of the Regulation of the Minister of Public Works and Public Housing Number 28/Prt/M/2015 Concerning Boundary Lines River and Lake Boundary Lines. State Agency 2015 Number 772.

characteristics of the river. Based on Article 4 paragraph (2) of the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015, the determination of boundary lines is adjusted to the type of river, namely unbanked rivers in urban areas, unbanked rivers outside urban areas, embanked rivers in urban areas, embanked rivers outside urban areas, rivers affected by sea tides, and spring areas. These regulations aim to ensure that the protection of boundary areas can be adjusted to the characteristics of each river so that the protection function can be carried out effectively.

The Pelayaran River, the object of this research, is categorized as an unbanked river located in an urban area. According to the Seluna Water Resources Management Center (BPSDA) of Demak Regency, the Pelayaran River is one of the river networks that has a strategic function in the water resources management system in Demak Regency. This river acts as a flood control channel, main drainage, and supports the irrigation system for the surrounding area.¹⁴ The Pelayaran River is part of the Pelayaran River Basin (DAS) system that originates in the Rawa Pening area, Semarang Regency, then flows through Demak Regency until it empties into the Java Sea. In the Karangtengah District area, the Pelayaran River passes through several villages, namely Karangsari Village, Karangtowo Village, and Wonokerto Village, and runs parallel to the Semarang-Demak Pantura

¹⁴ Kuswanto, H., & Nugroho, SS (2024). Law Enforcement Against Building Construction in the Area River Basin Area (Das) (Study in Dolopo District, Madiun Regency, East Java). *Yustisia Merdeka: Scientific Journal of Law*, 10(1), pp.50-58.

Road, a provincial road with a high level of economic activity. These characteristics make the Pelayaran River border area have significant pressure on spatial utilization because it directly borders residential areas, trade, and community economic activities.

Spatial utilization is a crucial aspect of spatial planning, which aims to create safe, comfortable, productive, and sustainable spaces. In its implementation, every spatial utilization activity, including building construction, must comply with the spatial functions stipulated in laws and regulations. To ensure this compliance, spatial planning control efforts are required as an instrument that directs, supervises, and ensures that spatial utilization is carried out in accordance with spatial plans and applicable legal provisions.

One area that requires strict spatial planning controls is the river riparian zone. This area is a protected area that plays a crucial role in preserving the environment, maintaining river flow capacity, controlling flooding, and protecting river ecosystems from various forms of spatial use that could potentially disrupt their natural functions. Therefore, spatial use in the river riparian zone cannot be carried out freely, but must comply with the provisions stipulated in the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 concerning the Determination of River and Lake Boundary Lines.

Based on Article 15 paragraph (2) of the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015, the use of river boundary areas is only permitted for certain activities that do not disrupt the function of the river, such as the construction of water

resource infrastructure, bridges, piers, drinking water and gas pipelines, electricity and telecommunications cable networks, and buildings related to the provision of electricity.¹⁵ These provisions indicate that river boundary areas are not designated as locations for residential development or community business premises, so that any form of use of space outside these provisions is a violation of the function of river boundary areas.

However, research shows that riverbank areas are still widely used for the construction of illegal structures. Illegal structures are structures constructed without complying with applicable spatial utilization regulations or permit requirements, and are often located on state land or areas not owned by the building owner. The presence of these illegal structures not only converts protected areas into built-up areas but also has the potential to disrupt the river's ecological function, narrow water flow, increase environmental pollution, and hinder river maintenance and normalization activities.

These conditions demonstrate that spatial planning control efforts are not only carried out through establishing river boundaries, but also through a series of preventive and repressive measures that include building data collection, monitoring space utilization, community outreach, issuing warnings, inter-agency coordination, and even controlling buildings that violate regulations. All of these activities are part of the implementation of spatial planning control aimed

¹⁵ Indonesia 2015. Article 5 Paragraph 1 of the Regulation of the Minister of Public Works and Public Housing Number 28/Prt/M/2015 Concerning Boundary Lines River and Lake Boundary Lines. State Agency 2015 Number 772.

at ensuring that the function of river boundary areas remains in accordance with their intended use.

So that the research object in the Pelayaran River border area in Karangtowo Village, Karangtengah District, Demak Regency, still shows the existence of permanent and semi-permanent buildings that are used as residences and various business activities, such as food stalls, grocery stores, and other trading businesses. This condition shows that the use of space in the Pelayaran River border area is not fully in accordance with the provisions of the Minister of PUPR Regulation Number 28/PRT/M/2015, thus indicating that the implementation of spatial planning control efforts has not been running optimally.

2. Existing Condition of Buildings on the Pelayaran River Boundary

Existing conditions are the actual state of an object at the time of the research, as determined through field observations. This study focused on the Pelayaran River riparian area in Karangtowo Village, Karangtengah District, Demak Regency. Field observations were conducted to determine the physical condition of the area, the form of spatial utilization, and the presence of buildings within the river riparian area, the object of the study.

Based on data from the Central Statistics Agency (BPS) of Demak Regency, Karangtowo Village is one of the villages located in the southern part of Karangtengah District.¹⁶ This village has relatively close access to the government

¹⁶ Central Statistics Agency of Demak Regency. Geographical Location of Karangtowo Village. <https://Demakkab.Bps.Go.Id/Id> . 2022.

center of Karangtengah District and the capital of Demak Regency so that it can be reached in about 15-20 minutes by land, which is seen from the geographical map of Karangtowo Village included by the researcher. Geographically, Karangtowo Village borders several villages in Karangtengah District and has regional characteristics in the form of residential areas, agricultural land, and is traversed by the Pelayaran River and the Pantura National Road which are the main transportation routes in Demak Regency. This geographical location makes Karangtowo Village a fairly rapidly developing area, both in terms of settlements and community economic activities.

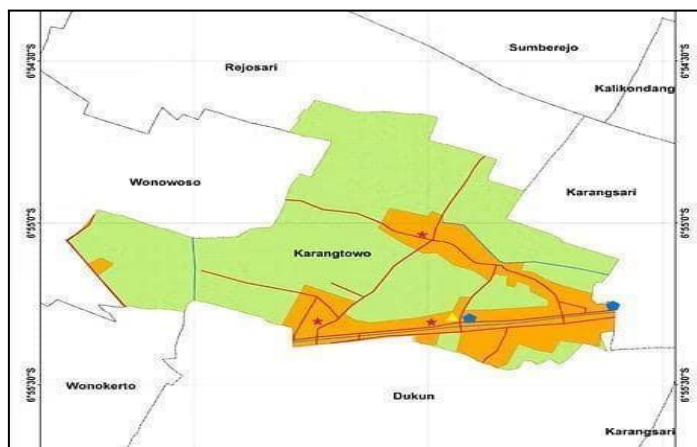


Figure 1. Map of Karangtowo Village, Karangtengah District, Demak Regency

Source: Karangtowo Village Archives

Documentation

This research focused on Karangtowo Village because in that area, a concentration of buildings was found standing in the Pelayaran River border area. Although the Pelayaran

River flows through several villages in Karangtengah District, the presence of illegal buildings in Karangtowo Village is relatively more than in other areas, making it a representative location to study the implementation of spatial utilization control based on the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 concerning the Determination of River and Lake Border Lines. The existence of these buildings did not occur suddenly, but was influenced by strategic location factors. The proximity of the Pelayaran River border area to the Semarang-Demak Pantura Road provides significant economic opportunities due to the high mobility of people and the flow of vehicles passing through every day. This condition encourages people to utilize land around the river border as a place to build business buildings even though it is in an area that should be protected by spatial planning provisions.



Figure 2. Existing Condition of Buildings on the Pelayaran River Boundary

Source: Researcher Documentation

The results of the researcher's documentation in the image above show that most of the buildings standing in the Pelayaran River border area are semi-permanent. Semi-permanent buildings are buildings that use a combination of permanent materials, such as concrete or brickwork, with non-permanent materials, such as wood, bamboo, zinc, or light steel frames. These characteristics result in the buildings having less durability than permanent buildings, but they are still used for a fairly long period of time as places of business and economic activities for the community. The existence of these semi-permanent buildings is one indicator that the use of space in the Pelayaran River border area has not fully complied with the provisions.

Based on field observations conducted by researchers on March 30, 2026, there are approximately 70 semi-permanent buildings along the Pelayaran River in Karangtowo Village. These buildings are used as food stalls, grocery stores, fruit and vegetable stalls, vehicle washes, workshops, parking lots, and various forms of micro, small, and medium enterprises (MSMEs). Some of the buildings were erected very close to the riverbank, and some even utilize the space above the riverbed as building expansions. This condition indicates that the function of the riverbank area as a protected space has changed to an area used for community economic activities.

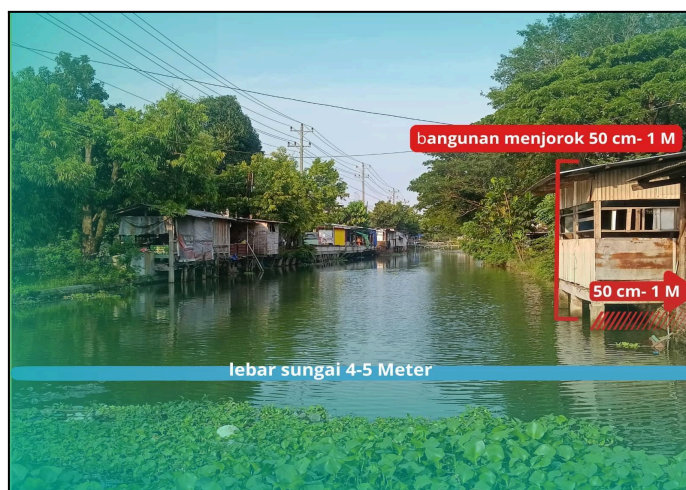


Figure 3. Distance of buildings jutting into the river with visual comparison

Source: Researcher Documentation

Based on the author's research results and illustrations in the form of visual comparisons, it is shown that the portion of the building that juts out towards the river is approximately 50 centimeters to 1 meter long from the edge of the land to the river body. Although this additional space is considered to provide benefits to the building owner, its presence has the potential to reduce the river's function as a protected area. In addition to narrowing the free space along the riverbank, this condition can also hamper river operations and maintenance activities, disrupt the smooth flow of water, and increase the risk of building damage due to river erosion when the water discharge increases.

From an environmental perspective, the presence of buildings along river banks has the potential to increase water pollution. Commercial and household activities around the river generate solid and liquid waste, which, if not managed

properly, can enter the river. The accumulation of waste under buildings jutting into the river also accelerates silting and degrades the quality of the aquatic environment. The impact of buildings along the Pelayaran River has been clearly documented, with the abundance of waste and aquatic vegetation causing sedimentation, which can complicate the management of the Pelayaran River's flow. Meanwhile, from a spatial planning perspective, the presence of semi-permanent buildings along the Pelayaran River banks indicates a use of space that is inconsistent with the river's protected area function.



Figure 4. Existing Condition of the Karangtowo Village Shipping River

Source: Researcher Documentation

These buildings grew gradually. Initially, there were only a few business buildings, but as industrial activity increased, other communities began to follow suit, constructing similar structures. This phenomenon demonstrates the process of spatial utilization influenced by economic activity in the surrounding area. What was initially

a small number of buildings later evolved into a series of business buildings that utilized the riverbanks as locations for economic activity.



Figure 5. PT Glory Industrial Demak, Jl. Perbalan, Dukun, Karangtengah, Demak Regency, Central Java 59561

Source: Researcher Documentation

The image above is the author's documentation, which is a portrait of PT. Glory Industrial Demak, which directly faces the Pelayaran River in Karangtowo Village. Based on field observations and interviews with the community on April 11, 2026, and with Karangtowo Village officials on April 28, 2026, the development of industrial activities around the research location is suspected to be one of the factors driving the emergence of semi-permanent buildings in the Pelayaran River border area. One of the industries that has influenced the development of economic activity in the area is the garment industry, which began operating in 2013 and experienced quite rapid development from 2021 until the

time the research was conducted in 2026. Between 2013 and 2019, the number of buildings along the Pelayaran River was relatively limited. However, with increasing industrial activity and a growing workforce each year, the need for various supporting facilities, such as restaurants, grocery stores, vehicle storage services, and other services, has also increased. The local community has capitalized on this situation as an economic opportunity by constructing semi-permanent structures along the Pelayaran River.



Figure 6. Activities on the Pelayaran River border
Source: Researcher Documentation

Based on the researchers' observations, economic activity in the Pelayaran River riparian area exhibits a pattern that follows the operating hours of the surrounding garment industry. Trading activities generally begin between 3:00 PM and 6:00 PM, coinciding with the time industrial workers return home. During this time, the riverbank area is crowded

with workers purchasing food, daily necessities, or utilizing vehicle storage services. This situation indicates that economic activity in the area is heavily influenced by the high mobility of industrial workers.

The research also shows that not all vendors using semi-permanent structures along the Pelayaran River are native to Karangtowo Village. Most vendors come from outside the village and operate their businesses by renting kiosks or semi-permanent structures along the riverbank. These structures are generally owned by Karangtowo residents whose homes are located directly across or facing the Pelayaran Riverbank. The types of businesses they operate include food stalls, vegetable vendors, grocery stores, fruit stalls, and various other food products.

This condition is reinforced by the results of an interview with Mrs. Umi Lanisti, a resident of Karangtowo Village, who stated, "The area that was previously dominated by various types of plants, such as mango, guava, and shrubs, has now been largely transformed into semi-permanent buildings used as trading places. The busiest location is in front of the Glory factory because every hour after work the area is filled with thousands of workers passing by." (Interview with Umi Lanisti, Karangtowo Village Community, March 5, 2026).

Empirical evidence based on the author's research indicates that along the Pelayaran River, buildings and kiosks located along the riverbanks are often rented. This informal rental system is conducted by building owners to vendors, with an average monthly rental fee of around Rp 500,000 or more, depending on the size, condition, and location of the

building. This practice provides economic benefits for building owners and creates business opportunities for tenants.

Furthermore, interviews with several traders revealed that some of them originate from outside Karangtowo Village. Prior to operating their businesses in the area, most worked as farmers, fish farmers, or fishermen. However, changing environmental conditions and declining productivity in their home areas, including ecological disasters such as tidal flooding and land degradation, have prompted them to shift to the informal trade sector. They then chose to open businesses in areas with high market potential, including the Pelayaran River, which is located near the industrial area and the Semarang- Demak Pantura Road. In addition to the strategic location, some traders also have kinship or social ties with Karangtowo Village residents and industrial workers, making it easier for them to rent buildings and operate businesses in the area.

The findings indicate that the presence of semi-permanent buildings in the Pelayaran River riparian area is not only influenced by the economic needs of the local community, but also by increasing industrial activity, high labor mobility, and the shift in community livelihoods from the primary sector to the informal trade sector. Despite providing economic benefits, the practice of utilizing the river riparian area as a business location still conflicts with the function of the river's protected area and has the potential to cause spatial planning and environmental problems if not controlled in accordance with the objectives of establishing

the riparian line based on the Minister of Public Works and Housing Regulation Number 28/PRT/M/2015.

3. Analysis of the Conformity of Practices with Norms

In essence, the practice of utilizing space in society should be carried out in accordance with applicable legal provisions. However, in reality, there is often a gap between *das sollen* (legal provisions) and *das sein* (factual conditions on the ground). This gap indicates that legal norms have not been fully implemented effectively in society.¹⁷

Based on field observations, the existing conditions in the Pelayaran River border area, Karangtowo Village, indicate a discrepancy between legal provisions regarding river border lines and ongoing spatial utilization practices. Along the river border, semi-permanent buildings are found that are used as places for community economic activities. The existence of these buildings contradicts the function of the river border as a protected area that must be maintained as stipulated in the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 concerning the Determination of River and Lake Border Lines.

The development of semi-permanent buildings in the Pelayaran River border area began to increase around 2019. Initially, these buildings were few in number, but as economic activity around the research site grew, their number continued to grow, reaching an estimated 70 buildings spread

¹⁷ Haidar, M., & Rozak, AM (2024). Analysis of River Boundary Line Violations in Wahyu Housing Complex Utomo Ngaliyan Semarang. *Mysterious: Publication of Visual Communication Art and Design*, 1(4), Pages: 52-59.

along both sides of the Pelayaran River by 2026. Most of the buildings are used as food stalls, grocery stores, motorcycle storage areas, fruit stalls, vegetable stalls, and various forms of micro, small, and medium enterprises (MSMEs). In addition to their increasing number, the buildings are generally located close together, forming a row of business buildings along the riverbank.

The author's observations and interviews with traders and Karangtowo Village government officials revealed that not all building owners or users are residents of Karangtowo Village. Some buildings are occupied by traders from outside the village on a rental basis. This practice occurs because some residents who own houses along the village road believe that the riverbank land directly in front of their homes can be utilized or managed as part of their ownership rights. Based on this assumption, some residents then erected semi-permanent buildings and rented them to others as business premises. This finding indicates a misperception regarding the legal status of riverbank land, which ultimately leads to the use of space that is not in accordance with statutory provisions.

Furthermore, field observations indicate that several buildings have been constructed with structures that jut out into the Pelayaran River. These protruding sections extend between 50 centimeters and 1.5 meters from the shoreline into the river. This situation not only reduces free space in the riverbank area but also has the potential to hamper river operations and maintenance, narrow the water flow, and increase the risk of pollution, siltation, and flooding.



*Figure 7. Building jutting out into the Pelayaran River,
Karangtowo Village*

Source: Researcher Documentation

The use of space in river boundary areas must in principle be implemented in accordance with the provisions of laws and regulations in order to maintain the function of the river as a protected area. According to Article 1 number 10 of the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 concerning the Determination of River Boundary Lines and Lake Boundary Lines, river boundary lines are lines determined on the left and right sides of the riverbed as the boundaries of the river protection area so that its natural function is not disturbed by activities that develop around it.¹⁸ This provision is in line with Article 3 paragraph (2) of the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015 which states that the determination of river

¹⁸ Indonesia 2015. Article 5 Paragraph 1 of the Regulation of the Minister of Public Works and Public Housing Number 28/Prt/M/2015 Concerning Boundary Lines River and Lake Boundary Lines. State Agency 2015 Number 772.

boundary lines aims to ensure the continued functioning of rivers, maintain environmental sustainability, and control the potential destructive power of water to the surrounding areas.¹⁹

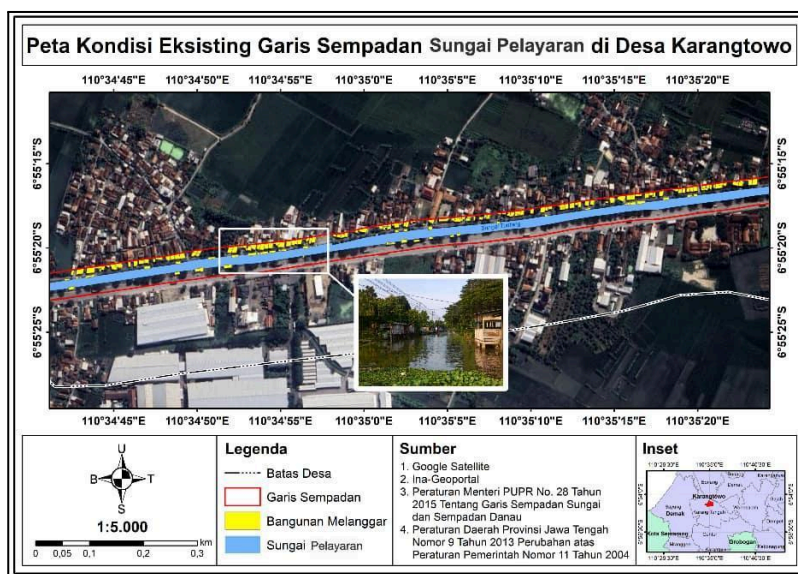
The determination of river boundary lines is carried out by considering the physical characteristics of the river, such as the presence of embankments, river depth, and river location. These considerations are necessary because each type of river has different characteristics and therefore requires different protection limits. Based on Article 5 paragraph (1) letter a of the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015, the boundary line for unembanked rivers in urban areas with a depth of less than or equal to 3 (three) meters is set at least 10 (ten) meters from the left and right edges of the riverbed. These provisions are intended to provide adequate protection space to maintain river function, support river operations and maintenance activities, and prevent disturbances due to human activities in the surrounding area.

Based on the results of field observations, it shows that the Pelayaran River in Karangtowo Village is included in the category of unbanked rivers located in an area with a fairly high intensity of residential, commercial, and industrial activities. Therefore, every form of spatial utilization in the Pelayaran River border area should refer to the provisions of the river border line as regulated in the Minister of Public Works and Public Housing Regulation Number

¹⁹ Indonesia 2015. Article 5 Paragraph 1 of the Regulation of the Minister of Public Works and Public Housing Number 28/Prt/M/2015 Concerning Boundary Lines River and Lake Boundary Lines. State Agency 2015 Number 772.

28/PRT/M/2015. Land use, building construction, and other activities around the river must pay attention to the established border boundaries so as not to disrupt the river's function as a water resource infrastructure and protected area.

These regulations aim to maintain the river's capacity to carry water, reduce the risk of flooding, prevent environmental damage, and protect the ecosystems within the riverbank area. Conversely, if buildings or activities exploit the riverbank area without adhering to the riverbank provisions, the river's function as a protected area will be disrupted. These impacts include narrowing of the riverbed, disruption of river operations and maintenance, environmental degradation, increased flood risk, and disruption of the river's ecosystem balance. In addition to causing environmental impacts, the use of space inconsistent with the provisions of the riverbank also violates laws and regulations governing river protection and spatial planning.



*Figure 8. Map of the Boundary Lines of the Pelayaran River,
Karangtengah District, Demak Regency
Source: Researcher Documentation*

Based on the boundary map above, the blue line is the boundary of the Pelayaran River. Buildings erected in the river boundary area should be required to comply with the provisions regarding boundary distance and licensing requirements as stipulated in laws and regulations. These provisions aim to maintain the function of the river boundary as a protected area, prevent inappropriate use of space, and ensure the sustainability of the river's function as a water resource. Based on Article 5 paragraph (1) letter a of the Regulation of the Minister of Public Works and Public Housing Number 28/PRT/M/2015, the river boundary line without embankments in urban areas with a depth of less than or equal to 3 (three) meters is set at least 10 (ten) meters from the left and right edges of the riverbed. Therefore, buildings in the river boundary area in the Pelayaran River boundary map are buildings that violate and do not have a building permit.

Based on the author's research results, the buildings located in the Pelayaran River border area of Karangtowo Village do not meet the boundary distance requirements as stipulated in the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015. In fact, several buildings were found standing very close to the riverbank and some of their structures jutted out into the river body. This condition indicates a deviation in the use of

space that has the potential to disrupt the river's protective function. Thus, these buildings can be categorized as buildings that do not comply with the provisions regarding river boundary lines.

The use of the Pelayaran River border area as a location for trade and service activities is also not in accordance with the designation of river border areas. Based on Article 15 paragraph (2) of the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015, the use of river border areas is in principle limited and only permitted for certain activities related to the public interest, such as the construction of water resources infrastructure, bridges, utility networks, cable installations, pipe networks, and other infrastructure that supports public service functions. Thus, the use of river border areas as a trading location, the establishment of kiosks, or the rental of buildings for business activities is not included in the forms of use permitted under these provisions.

The research also revealed the practice of renting buildings located in riverbank areas to vendors. This practice is carried out by some residents who believe the riverbank area in front of their homes can be used or controlled privately. However, the riverbank area is a protected area, managed by the state and restricted by statutory regulations. Therefore, the practice of renting buildings or using riverbank land for commercial purposes constitutes a form of land use that violates legal provisions. This situation is further exacerbated by weak supervision and control of land use, resulting in the riverbank area developing into a commercial area filled with semi-permanent buildings on both sides of the river.

This phenomenon indicates a gap between legal provisions and conditions in the field. According to Roscoe Pound, through the theory of *law as a tool of social engineering*, the law functions as a means of *social engineering* that not only aims to create order, but also directs changes in community behavior towards conditions that are in accordance with development goals and the public interest.

²⁰In the context of this research, the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015 should be a legal instrument capable of directing the community not to use riverbank areas outside their intended use. ²¹However, the results of the study indicate that the existence of this legal norm has not been able to change community behavior effectively. The continued discovery of semi-permanent buildings, building rental practices, and trade activities in the Pelayaran River riparian area indicates that the function of law as a means of social engineering has not been running optimally. Thus, it is necessary to strengthen law enforcement, increase supervision, and provide guidance to the community so that the objectives of spatial planning control and protection of riverbank areas can be realized effectively.

²⁰ Sundari, Nata, Fasya Zahra Luthfiyah, and Windi Rahmawati. "The Role of Law as an Engineering Tool" Society According to Roscoe Pound." *Das Sollen: Journal of Contemporary Studies of Law and Society* 2, No. 01 (2024). Pages: 43-44.

²¹ Putri, DN, & Sastra, AR (2024). Identification of Buildings Located in River Boundary Areas Musi (Status Quo Building) Palembang City. *Global Techno Journal*, 13(01), Pages:14-20.

B. The Factors that Hinder the Effectiveness of Controlling Illegal Buildings in the Pelayaran River Boundary Area, Karangtowo Village, Demak Regency

The effectiveness of spatial planning control over illegal buildings in riverbank areas is largely determined by the successful implementation of applicable legal provisions. Such control depends not only on the existence of laws and regulations, but also on the extent to which these regulations can be implemented and complied with by the community. In reality, control of illegal buildings in the Pelayaran River riparian area, Karangtowo Village, Karangtengah District, Demak Regency, has not been implemented effectively. Although there are legal provisions governing the determination of river boundaries and restrictions on the use of space in riparian areas, research results show that illegal buildings that do not comply with boundary line provisions and do not have the required permits continue to develop and are used as business premises and for community economic activities.²²

Based on Soerjono Soekanto's theory of legal effectiveness and the results of field research, it can be

²² Mohd. Yusuf Dm, Andry Kusuma Putra, Revi Yanti Hasibuan, and Selvin Delpian Giawa. "Factors-Factors Influencing Law Enforcement in Society." *Journal of Law, Humanities and Politics* Vol. 5, no. 4 (2025). Pg.30-32 <https://doi.org/10.38035/Jihhp.V5i4.4234>.

concluded that the suboptimal control of illegal buildings in the Pelayaran River border area is influenced by various interrelated factors, namely legal factors, law enforcement factors, facilities and infrastructure factors, community factors, and cultural factors. Therefore, these five factors form the basis of analysis in this study to identify the causes of the ineffectiveness of spatial planning control of illegal buildings in the Pelayaran River border area, Karangtowo Village, Demak Regency.²³

1. Legal and Law Enforcement Factors (Structural)

Legal factors and law enforcement are one of the causes of the ineffectiveness of controlling illegal buildings in the Pelayaran River border area. The provisions of Article 15 paragraph (2) of PUPR Ministerial Regulation Number 28 of 2015 stipulate that river border areas can only be used in a limited way to support public interests, such as the construction of water resource buildings, bridges, pipelines, electricity networks, and public facilities. Based on these provisions, the use of river borders for commercial activities, including trade and rental of business land, is a form of use that does not comply with the rules.

The lack of clear warnings and education for the public regarding regulations regarding the use of riverbank land has led to the continued construction of buildings in the

²³ Soekanto, Soerjono. (2014). Factors Influencing Law Enforcement. Jakarta: Rajawali, Press. Page 52.

riverbank area.²⁴ This education should not be overlooked by the local government, particularly in Demak Regency. The local government has the authority to regulate and restore rivers to their proper function, educate and disseminate information regarding laws and regulations, and has full responsibility and authority for field supervision. These agencies are responsible for ensuring that the river functions in accordance with spatial planning regulations. Several agencies have the authority to carry out field supervision, issue warnings, and implement the results, including:

1) BBWS (Large River Basin Center) Pemali Juana, Central Java Province

The Pemali Juana River Basin Center is a technical implementation unit responsible for managing river basins in the Jratunseluna River Basin and the Pemali–Comal River Basin in Central Java Province. The Pelayaran River is part of the Jratunseluna River Basin, and its management is the responsibility of the Pemali Juana River Basin Management Agency (BBWS). The Jratunseluna River Basin covers several regencies and cities in Central Java Province, including Semarang City, Kendal Regency, Semarang Regency, Salatiga City, Boyolali Regency, Sragen Regency, Grobogan Regency, Demak Regency, Jepara Regency, Kudus Regency, Pati Regency, Blora Regency, and Rembang Regency.²⁵

²⁴ Fuah, Marfuah. "The Effectiveness and Function of Law in Society: A Philosophical Perspective" *Law. Desiderata Law Review* 1, No. 2 (2024): 35-44. <https://doi.org/10.25299/Dlr.2024.19711>

²⁵ Ministry of Public Works Directorate General of Water Resources Pemali-Juana River Basin Center, <https://sda.pu.go.id/Balai/BbwspemaliJuana/> . 2025.

The River Basin Office (BBWS) is a technical implementation unit under the Ministry of Public Works, tasked with overseeing water resource management in river basins within its jurisdiction. In carrying out these duties, the BBWS is responsible for watershed (DAS) management, water resource conservation, water resource utilization, water damage control, and the operation and maintenance of water resource infrastructure.

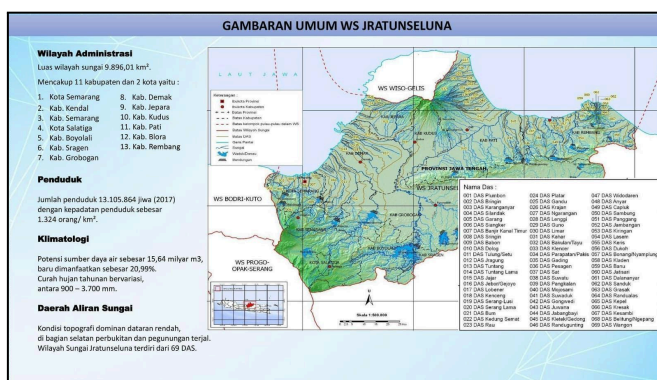


Figure 9. Map of the Jratunseluna River Basin
Source: Ministry of Public Works, Directorate General of
Water Resources, Pemali Juana River Basin Center

The river flow map shows the authority to manage water areas and river boundary areas under the responsibility of the Pemali Juana River Basin Center. In the context of controlling land use in river boundary areas, every form of land use should be under the supervision of this institution as the river management authority. Based on its duties and functions, the Pemali Juana River Basin Center has the responsibility to implement water resource management. The authority it has in river boundary areas includes regulating river protection functions, implementing operations and

maintenance, and supervising the prohibition of land conversion or the construction of buildings without permits. The goal is to maintain the sustainability and preservation of river functions while preventing environmental damage. conducting and conducting research on determining the boundaries of rivers, lakes, reservoirs, irrigation networks, springs, reservoirs, ponds, and swamps. This is stated in article 38 letter (n) of the Regulation of the Minister of Public Works and Public Housing number 1 of 2025, which regulates the organization and work procedures of public implementation units and public housing.²⁶

Based on Announcement Number 2/PENG/AO/2025 issued by the Pemali Juana River Basin Center (BBWS) on March 11, 2025, it can be used as empirical evidence that the Pemali Juana BBWS has carried out preventive efforts in the form of providing information and warnings to the public regarding the prohibition on the use of riverbank and border areas that are not in accordance with the provisions of laws and regulations.²⁷ The announcement expressly bases its prohibition on the Regulation of the Minister of PUPR Number 28 of 2015 concerning the Determination of River Boundary Lines and Lake Boundary Lines, which regulates the function of riverbanks and borders as protected areas to

²⁶ Indonesia 2025. Regulation of the Minister of Public Works Number 1 of 2025 concerning the Organization and Work Procedures of Technical Implementation Units in the Ministry of Public Works. Bn.2025 (252)/94 Pg.

²⁷ Ministry of Public Works and Public Housing Directorate General of Water Resources, Balai Besar Pemali-Juana River Region, [https://sda.pu.go.id/Balai/Bbwspemalijuana/Files/Pengumuman/Pengumuman_Larangan_Memanfaatkan_Room_Bantaran_And_Border_River_\(2\).Pdf](https://sda.pu.go.id/Balai/Bbwspemalijuana/Files/Pengumuman/Pengumuman_Larangan_Memanfaatkan_Room_Bantaran_And_Border_River_(2).Pdf)

maintain the function of rivers from erosion, pollution, and ensure the smooth flow of water.



KEMENTERIAN PEKERJAAN UMUM
DIREKTORAT JENDERAL SUMBER DAYA AIR
BALAI BESAR WILAYAH SUNGAI PEMALI - JUANA
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PENGUMUMAN
LARANGAN MEMANFAATKAN RUANG BANTARAN DAN SEMPADAN SUNGAI
 Nomor: 2 /PENG/Ao/2025

Sebagai wujud pengelolaan sumber daya air secara berkelanjutan, antara lain melalui konservasi sumber daya air, pendayagunaan sumber daya air serta pengendalian daya rusak air, sesuai Undang Undang Nomor 17 Tahun 2019 tentang Sumber Daya Air, dalam pasal 25, "setiap orang dilarang melakukan kegiatan yang mengakibatkan terganggunya kondisi tata air daerah aliran sungai, melakukan kegiatan yang mengakibatkan terganggunya upaya pengawetan air dan mengakibatkan pencemaran air"

Bahwa berdasarkan Peraturan Menteri Pekerjaan Umum dan Perumahan Rakyat Nomor 28 tahun 2015 tentang penetapan Garis Sempadan Sungai dan Garis Sempadan Danau dipedomani bahwa Bantaran Sungai adalah ruang tepi palung sungai dan kaki tanggul sebelah dalam yang terletak di kiri dan/kanan palung sungai **berfungsi untuk pengaliran debit aliran sungai**, Sempadan Sungai adalah ruang di kiri dan kanan palung sungai di antara garis sempadan tepi luar kaki tanggul untuk sungai bertanggul, **berfungsi untuk melindungi sungai dari gerusan, erosi dan pencemaran**.

Sehubungan dengan hal tersebut di atas dapat disampaikan :

1. Bahwa hilangnya sempadan sungai karena okupasi peruntukan lain dapat mengakibatkan turunnya kualitas air sungai, mengganggu kestabilan sungai, dan menghalangi kegiatan OP pada sungai.
2. Bantaran sungai sebagai ruang pengaliran debit aliran atau penyalur banjir tidak diperkenankan digunakan untuk kegiatan yang dapat mempersempit ruang pengaliran debit aliran atau penyalur banjir tersebut.
3. Bahwa dalam hal terdapat kepemilikan oleh masyarakat, sepanjang hak milik atas lahan tersebut sah kepemilikannya, tetap diakui, namun pemilik lahan wajib mematuhi peruntukan tersebut sebagai sempadan.
4. **Bahwa BBWS Pemali Juana tidak pernah memberikan kewenangan kepada siapapun dan pihak manapun dalam bentuk apapun untuk memberikan izin dalam hal pemanfaatan ruang bantaran dan sempadan sungai yang tidak sesuai peruntukannya.**

Berkenaan dengan hal tersebut kepada seluruh masyarakat agar berhati-hati dan mewaspadai aksi penipuan dengan modus pengurusan permohonan izin pemanfaatan bantaran atau sempadan sungai dalam bentuk izin penggunaan sumber daya air. Apabila terjadi pelanggaran dan okupasi ruang bantaran atau sempadan tanpa izin dapat menyampaikan kepada BBWS Pemali Juana atau aparat penegak hukum/kepolisian.

Demikian disampaikan, untuk dapat menjadikan perhatian.

Semarang, 11 Maret 2025
 Kepala
 Balai Besar Wilayah Sungai Pemali Juana,
 ttd
Fikri Abdurrahman, S.T., M.Sc.
 NIP 197712222005021002

*Salinan Sesuai dengan aslinya

Figure 10. Announcement prohibiting the use of riverbanks and boundaries

Source: Directorate General of Water Resources, Pemali-Juana Water Resources Management Agency.

In the announcement, the Pemali Juana River Basin Management Agency (BBWS) emphasized that riverbanks are not permitted to be used for activities that could narrow the

river's flow or channel floodwaters. Furthermore, the Pemali Juana BBWS also stated that it has never authorized anyone to issue permits for the use of riverbanks or river boundaries that are not in accordance with their intended use. Furthermore, the public is urged to be wary of fraudulent practices in the name of granting riverbank utilization permits and is asked to report any violations or occupation of riverbank areas to the Pemali Juana BBWS or law enforcement officials.

Thus, the existence of the official announcement shows that BBWS Pemali Juana has implemented one form of preventive control through announcement media to the public as an effort to provide information, warnings, and confirmation regarding the prohibition on the use of river border areas that are contrary to the Minister of PUPR Regulation Number 28 of 2015. However, based on the results of research in Karangtowo Village, the discovery of semi-permanent buildings and business activities in the Pelayaran River border area shows that these preventive efforts have not been fully effective in increasing public compliance with the provisions on the use of space in the river border area.

In exercising its authority, the Pemali Juana River Basin Agency (BBWS) controls the use of river riparian areas through a series of administrative steps. These steps aim to prevent violations of spatial use and ensure the protection of river functions in accordance with statutory provisions. The control steps include the following:

- a. Data Collection and Inventory

The Pemali Juana River Basin Management Agency (BBWS) and a joint team conducted identification,

mapping, and measurement of land boundaries and river boundaries. This assessment must be carried out in detail and take into account the procedures for establishing boundaries according to the type of river being designated.

b. Socialization and Warning

The BBWS issues a prohibition notice, followed by outreach to violating residents to demolish their buildings themselves. Enforcement must be based on regular notification, providing outreach or education regarding the prohibition and violation of building in riverbank areas, in accordance with applicable regulations.

c. Issuance of a Warning Letter (SP)

If the deadline for independent demolition is exceeded, the joint team will issue a verbal warning, then if the warning is not heeded, they will issue a written warning, namely SP 1, SP 2, up to SP 3, which are spaced 7 days apart.

d. Execution of Order

The forced demolition was carried out by an integrated team consisting of the Pemali Juana BBWS, and in collaboration with institutions related to river boundary areas such as the DPUPR, Satpol PP, TNI, and Polri.

e. Normalization and Arrangement

Following the clean-up, BBWS carried out normalization and cleaning to restore the boundary's function as a water inspection route and green open space.

Regulation of the Minister of Public Works and Public Housing Number 28 of 2015 concerning the Determination of River Boundary Lines and Lake Boundary Lines, Article 15 paragraph (1) states that if there are buildings in areas that have been designated as river boundary lines, the buildings remain in *status quo*. This means that the existence of these buildings cannot be developed or expanded, and they must be gradually regulated in order to restore the function of the river boundary area as it should be as a river protection area. However, in its interpretation, the Pemali Juana BBWS has not provided strict regulations regarding the existence of illegal buildings along the Pelayaran River boundary, specifically in Karangtowo Village, Karangtengah District. This is because although supervision and regulation of unauthorized use is the authority of the BBWS itself, technically it must follow the regional regulations that regulate the river area, such as the local RTRW.

The implementation of the regulation of illegal buildings in the riverbank area is essentially part of the effort to control the use of space that requires careful planning and coordination. The regulation cannot be implemented immediately because it must consider various aspects, including compliance with national priority programs, policies stated in the Pemali Juana BBWS Strategic Plan (Renstra), budget availability, and the readiness of human resources and supporting facilities. In addition, the implementation of the regulation also requires coordination with various agencies that have relevant authorities, such as the Public Works and Spatial Planning Agency (DPUPR), the Civil Service Police Unit (Satpol PP), local governments, the

Indonesian National Armed Forces (TNI), and the Indonesian National Police (Polri). Thus, the success of the regulation depends not only on the authority of the Pemali Juana BBWS, but also on the synergy between the agencies involved.

Based on the research results, supervision of the utilization of the Pelayaran River riparian area carried out by the Pemali Juana BBWS together with the local government has not been running optimally. This condition is indicated by the continued discovery of semi-permanent buildings standing in the river riparian area, even though their number continues to increase and is used as a place of business and economic activities for the community. This fact shows that the supervision and control efforts that have been carried out have not been able to prevent the emergence of new buildings or regulate long-standing buildings. In addition, coordination between agencies that have authority related to spatial planning and water resource management is still not optimal. The Pemali Juana BBWS Strategic Plan also identifies a lack of coordination between stakeholders and low integration of land use regulations in the river riparian area as one of the obstacles in controlling the destructive power of water. This condition makes the process of supervision, regulation, and enforcement of regulations on buildings in the river riparian area less effective because each agency has different authorities and requires synergy in its implementation.

The research findings align with the Pemali Juana Watershed Management Agency's 2025–2029 Strategic Plan, which identifies one of the challenges facing water resource management in the Jratunseluna River Basin as the

increasingly difficult-to-control growth of settlements and buildings along riverbanks. The strategic plan also states that the implementation of controls on water resource use violations is still not optimal, thus impacting the effectiveness of riparian protection.

Interviews with the community and government officials in Karangtowo Village indicate that a lack of public understanding of the legal provisions regarding the use of river boundary areas is one of the factors influencing the low level of compliance with applicable regulations. Although there are provisions that regulate the prohibition of building construction in river boundary areas along with sanctions for violations, based on the results of the study, many people still do not understand the function of river boundaries as protected areas. This condition is caused by the less than optimal socialization carried out by authorized agencies regarding the provisions of river boundary lines, prohibitions on spatial use, and the legal consequences of violations committed. As a result, some people consider that land use in river boundary areas is normal as long as there is no direct regulatory action from the government.

D In addition to being influenced by low public understanding, controlling the use of riparian areas also depends heavily on the implementation of the Regional Spatial Plan (RTRW) as a legal instrument in spatial planning. The RTRW serves as a guideline for planning, utilizing, and controlling space so that each land use is in accordance with its intended use. In the context of riparian areas, the RTRW plays a crucial role in regulating spatial use to maintain the river's protective function, prevent land use irregularities, and

ensure the sustainability of the river's ecological and hydrological functions. Therefore, every form of spatial use in riparian areas must refer to the provisions of the RTRW and laws and regulations governing river boundaries.²⁸

As regulated in Demak Regency Regional Regulation Number 1 of 2020 concerning Amendments to Demak Regency Regional Regulation Number 6 of 2011 concerning the Demak Regency Spatial Planning Plan for 2011–2031, specifically Article 25 paragraph (2), the Demak Regency Regional Spatial Planning Plan (RTRW) stipulates that river basin (DAS) management will be used to improve the management of the Jratun Seluna National Strategic River Basin. The scope of this management includes:

- a. Babon River Basin
- b. Shipping Watershed
- c. Jragung River Basin
- d. Serang River Basin
- e. Dolok River Basin
- f. Kaliombo River Basin
- g. Setu River Basin²⁹

Physically, the Pelayaran River in Karangtowo Village is relatively small. However, its strategic location, directly opposite the PT Glory Industrial Demak area, has led to the development of the riverbank area as a center of economic activity for the community. The implementation of this

²⁸ Muhammad Amin1, et al. "Inappropriateness of Using River Boundary Areas as Settlements, Integrative Perspectives of Social and Science Journal (Ipssj), Volume 2 No.6 2025.

²⁹ Article 25 Paragraph 2, Demak Regency Regional Regulation Number 1 of 2020 concerning Amendments to Demak Regency Regional Regulation Number 6 of 2011 concerning the Demak Regency Regional Spatial Planning Plan for 2011-2031

regulation has also had social and economic consequences for the affected community. Some traders rely on this location for their livelihood due to its proximity to the industrial area, which is their primary source of consumers. This trading activity provides economic benefits to the community, both for the traders themselves and for industrial workers, who find it easier to meet their daily needs.

"There has been no large-scale demolition in Karangtowo Village by the authorized agencies. There have only been river normalization activities, brief notification to the community, and the installation of warning signs. However, the community has never heeded these warnings." (Interview with Mr. Mudin, Karangtowo Village Government Staff, April 28, 2026). This statement indicates that the control efforts carried out are still preventive in nature and have not been followed by repressive actions in the form of regulation or complete demolition of buildings. This condition indicates that the supervisory and law enforcement functions have not been running optimally and have not been able to increase community compliance with the provisions regarding the use of river boundary areas.

Thus, the suboptimal supervision and coordination between agencies is one of the factors causing the ineffective control of illegal buildings in the Pelayaran River riparian area. Although the Pemali Juana River Basin Management Agency (BBWS) has the authority and control mechanisms as stipulated in laws and regulations and internal policies through the 2025–2029 Strategic Plan, its implementation still faces various obstacles, both in terms of institutional coordination, budget constraints, and the complexity of

implementing control in the field. Therefore, strengthening inter-agency coordination, increasing the intensity of supervision, and providing adequate budget support is needed so that control of the use of river riparian areas can be implemented more effectively in accordance with the objectives of water resource protection.

Low public compliance with legal provisions and the suboptimal implementation of the Spatial Planning (RTRW) as an instrument for controlling spatial use are interrelated factors contributing to the continued prevalence of illegal construction in the Pelayaran River riparian area. This situation demonstrates that spatial planning control requires not only strict law enforcement, but also increased outreach, public education, and consistent implementation of the RTRW by all authorized agencies. Consequently, the lack of clear sanctions for communities violating the river riparian land use plan by the Pemali Juana BBWS has led to public reluctance to comply with existing regulations even though they are aware of the violations they have committed.³⁰ This situation demonstrates that the success of river riparian delimitation depends not only on the existence of regulations, but also on effective implementation and enforcement of the law in the field. There are many reasons why violations of spatial use in the Pelayaran River riparian area continue to

³⁰ Hidayat, Janthy Trilusianthy, and Novida Waskitaningsih. "Land Use Analysis of the Borders and Directions for Controlling Them: Case Study of Borders Among the Cipakancilan River Borders Bogor With the Railway Boundary in Kebon Pedes Village, Tanah Sareal District, Bogor City." *Journal Locus of Research and Community Service* 4, No. 8 (2025). Pages: 37-39. <https://doi.org/10.58344/Locus.V4i8.4199>.

occur, including a lack of inter-agency coordination and ineffective outreach and enforcement of sanctions.³¹

2) DINPUTARU (Public Works and Spatial Planning Department) of Demak Regency

The Public Works and Spatial Planning Agency (DINPUTARU) of Demak Regency is a regional agency that plays a strategic role in administering government affairs in the field of public works and spatial planning. In carrying out its duties and functions, DINPUTARU is responsible for policy formulation, spatial planning, spatial utilization control, infrastructure development, and supervision of spatial utilization to ensure compliance with statutory provisions. Therefore, DINPUTARU plays a crucial role in realizing orderly spatial planning, including controlling the utilization of river border areas in Demak Regency.

Based on the division of work areas of the Public Works and Spatial Planning Agency of Demak Regency, the Pelayaran River area located in Karangtowo Village, Karangtengah District, is included in Region I, which includes the northern and western areas of Demak Regency as well as buffer and industrial areas, namely Sayung District, Karangtengah District, and Demak District. Thus, controlling the use of space in the Pelayaran River border area is one part of the administrative responsibility of

³¹ Sholehuddin, Muhammad. "Law Enforcement Against Residential Buildings on River Boundaries" By the Surabaya City Government." Indonesian Legal Media 2, No. 7 (2025). Pages: 11-17.

DINPUTARU Demak Regency in implementing spatial planning in the region.

Based on the research results, the implementation of the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015 in Demak Regency has not been running optimally. This condition is indicated by the continued discovery of semi-permanent buildings and various community activities that utilize the Pelayaran River border area without paying attention to the provisions regarding river border lines. The existence of these buildings indicates that the control of spatial utilization in the river border area has not been fully able to realize orderly spatial planning as mandated by the legislation. In exercising its authority, the Demak Regency DINPUTARU is not only guided by the Minister of Public Works and Public Housing Regulation Number 28 of 2015, but must also refer to the Demak Regency Regional Spatial Plan (RTRW) as the main instrument for implementing spatial planning in the region. The RTRW serves as a guideline in the planning, utilization, and control of space, including the determination of protected areas and areas that have a protective function, such as river border areas.

Provisions regarding the protection of river riparian areas are regulated in Demak Regency Regional Regulation Number 1 of 2020 concerning Amendments to Demak Regency Regional Regulation Number 6 of 2011 concerning the Demak Regency Spatial Planning Plan for 2011–2031. In Article 83, the regional government establishes a strategy for protecting river riparian areas which includes:

- a. determination of river boundaries in urban and rural areas;
- b. regulation of spatial use in river boundary areas and irrigation networks;
- c. controlling buildings located in river border areas; And
- d. implementation of reforestation in river border areas.

As a follow-up to the protection strategy as regulated in Article 83, Article 107 letter b regulates provisions for zoning river boundary areas which include:

- a. permitted for the development of green open spaces;
- b. permitted for the construction of transportation infrastructure and facilities, water control structures, tourism facilities, energy facilities, and/or other activities that require a location on the riverbank;
- c. permitted for the installation of billboards, information boards, warning boards and safety signs;
- d. permitted for the construction of electricity networks, telecommunication towers, and telephone networks;
- e. permitted on condition that it is for the construction of buildings that support the function of river management, utilization of water resources, natural tourism, piers, energy facilities, and other functions that require a location on the riverbank in accordance with the provisions of laws and regulations;
- f. is permitted on a limited basis for settlements that existed before the Regional Regulation was established until relocation is carried out by the regional government or authorized agency; and
- g. It is prohibited to carry out activities that can reduce the ecological and aesthetic function of the area

through changes in the natural landscape, environmental destruction, or other actions that disrupt the sustainability of the river's function.

Based on these provisions, it is understood that the utilization of riverbank areas is not, in principle, an area that is freely used for various types of activities, but rather an area whose use is limited in accordance with the river's protective function. Activities permitted in riverbank areas generally include those that support the public interest, water resource management, environmental conservation, and infrastructure that requires a location on the riverbank. Conversely, activities unrelated to the river's protective function, including the construction of buildings for commercial or business purposes that do not comply with spatial planning provisions, are not included in the permitted forms of utilization.

Based on the results of an interview with Mr. Subakir, Head of the Welfare Section of the Karangtowo Village Government, the implementation of building regulation in the Pelayaran River border area in practice takes into account various aspects beyond the existence of the building itself. According to him, authorized agencies tend to prioritize regulation of buildings or activities that are deemed to cause urgent problems, such as buildings used for activities that are contrary to legal norms, religious norms, or social norms, for example, places selling alcoholic beverages, or permanent buildings that are erected without regard to applicable regulations. Therefore, as long as the presence of buildings in the river border area has not created conditions that are considered urgent, direct regulation measures are generally

not a priority (Mr. Subakir, Head of the Welfare Section of the Karangtowo Village Government, interview, April 28, 2026).

As a result, the implementation of the provisions prohibiting the construction of buildings on river banks is less than optimal because legal control tends to be selective based on the level of urgency and the resulting social impact. This situation can hamper the effectiveness of spatial utilization control, as buildings that violate the provisions are allowed to remain as long as they are not deemed to cause significant disruption to the community or the government. Thus, legal culture and social considerations are among the obstacles to achieving consistent and effective enforcement of spatial planning laws.³²

Based on the results of an interview with Mrs. Dyah Wiyat Sri as the Head of the Spatial Planning Substance Working Group of the Public Works and Spatial Planning Agency (DINPUTARU) of Demak Regency, it was explained that DINPUTARU has an important role in the implementation of spatial planning in Demak Regency, especially in the aspects of planning, control, and supervision of spatial utilization. However, in implementing the Regulation of the Minister of PUPR Number 28 of 2015 concerning the Determination of River Boundary Lines and Lake Boundary Lines, DINPUTARU is not only guided by these provisions, but must also adjust them to the Demak Regency Regional

³² Sutaryo, Saly Diah Ayu Kirana, and Kis Yoga Utomo. "Analysis of the Utilization of Border Space" River (Case Study: Kali Bekasi River, Bekasi City)." *Tambusai Education Journal* 7, No. 3 (2023). Pages 18-20.

Spatial Plan (RTRW) as the basis for implementing spatial planning in the region. According to her, socialization regarding the RTRW is still being carried out gradually in each sub-district, but until the time of the research, the socialization activities have not reached Karangtengah District (Mrs. Dyah Wiyat Sri, Head of the Spatial Planning Substance Working Group of DINPUTARU Demak Regency, interview, April 14, 2026).

This statement demonstrates that the implementation of PUPR Ministerial Regulation Number 28 of 2015 cannot be separated from the spatial planning policies applicable in the region. In the national spatial planning system, provisions regarding river boundaries must be integrated into the Regional Spatial Plan (RTRW) so that its implementation is in accordance with the characteristics, needs, and development policies in each region. Thus, DINPUTARU has an obligation to ensure that control of spatial use in river boundary areas is implemented based on synchronization between national provisions and the Demak Regency RTRW.

Thus, this condition is in line with research findings in Karangtowo Village which showed that many semi-permanent buildings are still standing in the Pelayaran River border area and are used as business premises. This situation indicates that the suboptimal socialization and education regarding the RTRW also contributes to the low level of community compliance with spatial planning provisions. Therefore, in addition to strengthening supervision and law enforcement, the Demak Regency DINPUTARU needs to increase the intensity of RTRW socialization evenly down to the sub-district and village levels

so that the community understands the rights, obligations, and limitations in utilizing space, especially in river border areas.

3) Satpol PP (Civil Service Police Unit) of Demak Regency

One factor hampering the effective control of illegal buildings in riverbank areas is the suboptimal implementation of legal aspects and law enforcement. Weak supervision and a lack of firm action from authorized agencies, particularly the Public Order Agency (SATPOL PP), have resulted in ongoing violations of spatial use in riverbank areas. The lack of regular and continuous supervision has resulted in many buildings erected without permits or in violation of riverbank regulations not being promptly detected and prosecuted. This situation has given rise to the public perception that such violations can be committed without significant consequences.

In enforcing a violation, especially enforcing it in the Pelayaran River border area in Karangtowo Village, Karangtengah District, various administrative aspects and the reality that exists in the community due to the demolition of illegal buildings they occupy must be taken into account. In enforcing it, the Satpol PP has operational procedures in accordance with regional regulations or regent regulations. The Demak Regency Satpol PP Standard Operational Procedures are regulated in the Demak Regent Regulation Number 22 of 2019 concerning Amendments to the Demak Regent Regulation Number 24 of 2012 concerning the Standard Operational Procedures of the Demak Regency

Civil Service Police Unit, the scope of action against violations is determined as follows: :

- a. Scope:
 - a) provide guidance and direction to the community and legal entities that violate Regional Regulations and Regent Regulations;
 - b) carry out coaching and outreach to the community and legal entities;
 - c) take non-judicial preventive measures; and
 - d) carry out judicial action.
- b. General requirements:
 - a) have a clear legal basis;
 - b) does not conflict with human rights principles;
 - c) carried out in accordance with established procedures; And
 - d) does not cause any casualties or losses to any party.

Then, in non-judicial preventive action against violators of the order, the Demak Regency Civil Service Police Unit will carry out:

- a. Violators of Regional Regulations and Regent Regulations are first asked to sign a statement of commitment to comply with and implement the applicable provisions within a period of 15 (fifteen) days from the date the statement was signed;
- b. If you do not implement or deny the statement, you will be given the following warning stages:
 - i. first warning letter with a deadline of 7 (seven) days;

- ii. second warning letter with a deadline of 3 (three) days;
- iii. third warning letter with a deadline of 3 (three) days;
- c. If it is still not complied with, the violation will be referred to the Civil Servant Investigator (PPNS) to be processed in accordance with the provisions of applicable laws and regulations.³³

However, based on observations and interviews with the Demak Regency Public Order Agency (Satpol PP), the implementation of the regulation of illegal buildings in the river border area cannot be carried out directly by Satpol PP. Every regulation action must be based on coordination with the agency that has technical authority over the object or area that is the location of the violation. In the context of illegal buildings in the Pelayaran River border area of Karangtowo Village, Satpol PP first coordinated with the Pemali Juana River Basin Center (BBWS) as the agency authorized in water resources management and the Demak Regency Public Works and Spatial Planning Agency (DINPUTARU) as the agency authorized in the field of spatial planning.

Such coordination is necessary to ensure that enforcement actions are carried out in accordance with the authority of each agency and based on the provisions of applicable laws and regulations. Before carrying out demolition actions, the enforcement mechanism generally begins with administrative efforts in the form of issuing

³³ Article 1, Demak Regent Regulation Number 22 of 2019 Concerning Amendments to Demak Regent Regulation Number 24 of 2012 Concerning Standard Operating Procedures for the Demak Regency Civil Service Police Unit. Regional News 2019 Number 22.

warning letters to violators in stages, namely the First Warning Letter (SP-1), Second Warning Letter (SP-2), and Third Warning Letter (SP-3). This procedure is basically no different from the mechanism implemented by BBWS Pemali Juana and DINPUTARU Demak Regency, which prioritize a persuasive and administrative approach before implementing enforcement actions.

In a statement, Mr. Aryo Soebajoe emphasized that there has been no regulation or demolition due to violating river boundaries, especially the Pelayaran River in Karangtowo Village because if we carry out demolition it is not our authority, we must immediately coordinate with the river area agency, namely BBWS and DINPUTARU Demak and even if we demolish it, it must be because there is a normalization every year according to the direction of the regional regulation or the Regent (Mr. Aryo Soebajoe, Head of the Investigation Section of Satpol PP, April 14, 2026).

Basically, in the field, there is no data found on the regulation and demolition by the Demak Regency Satpol PP in the river border area due to illegal shipping structures in Karangtowo Village. The regulation of river borders is actually difficult to do because it has obstacles such as, Coordination with river area institutions namely BBWS and Dinputaru must consider the meeting budget, field technicians, as well as new allocations for communities affected by the demolition and also consider Human Rights if carrying out demolition because the building is a livelihood for the community that owns it.

This was stated by Mr. Aryo Soebajoe that every demolition must have several considerations, namely referring

to regional regulations, coordination with other institutions, allocation of new places for the traders and we have a sense of humanity because it must be based on the conditions of the community (Mr. Aryo Soebajoe, Head of the Investigation Section of Satpol PP, April 14, 2026).

Consequently, monitoring of violations along the Pelayaran River in Karangtowo Village has not been optimal, and the lack of coordination between agencies authorized to manage and supervise riverbank areas also hinders enforcement. Agencies such as the Public Order Agency (SATPOL PP) often lack an integrated coordination mechanism. Consequently, monitoring, enforcing regulations, and controlling illegal buildings are ineffective due to differing perceptions, limited communication, and overlapping authority between agencies.

Thus, law enforcement is one of the factors contributing to the ineffectiveness of controlling illegal buildings in the Pelayaran River riparian area. Although law enforcement procedures have been clearly regulated in Demak Regent Regulation Number 22 of 2019, its implementation in the field still faces various obstacles, such as suboptimal supervision, limited enforcement, and the need for more intensive coordination between the Public Order Agency (Satpol PP), the Pemali Juana River Basin Management Agency (BBWS), the Public Works and Spatial Planning Agency, and the village government. Therefore, it is necessary to strengthen the implementation of supervisory and law enforcement functions consistently so that the goal of

controlling spatial use in the Pelayaran River riparian area can be achieved in accordance with statutory provisions.³⁴

2. Social and Cultural Factors

Community and cultural factors are among the obstacles to controlling illegal construction in the Pelayaran River boundary area of Karangtowo Village. Some residents do not yet understand that the river boundary area plays a crucial role as a river safety zone, water catchment area, and route for river management and maintenance activities. From the perspective of Soerjono Soekanto's theory of legal effectiveness, these conditions are related to community factors and legal culture. A regulation will not be effective if the community targeted by the regulation does not understand the substance and purpose of the regulation.³⁵

Field observations indicate that residents living along the Pelayaran River in Karangtowo Village feel they have ownership rights to the land they use. Despite knowing that the land is a riverbank, they still believe that the vacant land, which can be used freely, is theirs. This perception creates a negative stigma for other individuals, believing they have the right to exploit it for their own personal gain. This

³⁴ Firdaus, MA, & Mursalin, A. (2022). The Effectiveness of River Boundary Area Regulation with Social Community Culture in Banjarmasin City. *Banua Law Review*, 4(2), 196-203.

³⁵ Soekanto, Soerjono. (2014). *Factors Influencing Law Enforcement*. Jakarta: Rajawali Press, Page 52.

understanding has been passed down from generation to generation, ultimately leading to a culture of malpractice.³⁶

Based on interviews with Umi Lanisti, it was clear that the community was not yet fully aware of river protection regulations and the importance of maintaining riverbanks. At that time, their primary focus was on earning a living and meeting daily needs. Therefore, if residents now sell goods or build buildings near the river, they cannot be directly blamed. Moreover, some do so due to economic factors, limited land, or simply lack of other livelihood options. (Umi Lanisti, Karangtowo Village Community, March 5, 2026)

It is known that the residents who occupy the border are used with a rental system and do not have a building permit. On average, residents occupy a period of 1 to 5 years. This was stated by Mrs. Dyah Wiyat Sri that clearly the buildings on the border of the Pelayaran River in Karangtowo Village are buildings that violate, meaning they do not have a Building Permit (IMB), because to obtain a business permit must include the location of the building used as a business premises. If a business is built on a river border, legally they cannot get a building permit (Mrs. Dyah Wiyat Sri, Chair of the Working Team for the Substance of Spatial Planning at DINPUTARU, April 14, 2026).

When the normalization carried out by BBWS Pemali Juana and DINPUTARU Demak Regency in 2025 in the Pelayaran River, Karangsari Village, right next to Karangtowo Village, the response from the community was only

³⁶ Paramesty, R., & Khair, A. (2024). Utilization of River Boundary Lines by Communities Along Ancar River Flow in Mataram City Area. *Discretion Journal*, 3(2), Pages: 182-189.

indifferent because they felt they were not affected by the normalization of the area.³⁷ According to Mr. Subakir in his statement, the community was aware that they were violating but if the river normalization occurred, the community did listen but when the activity was completed, the community would return to occupy the riverbank land on the condition that the buildings were not permanent. (Mr. Subakir, Head of the Welfare Service of the Karangtowo Village Government, April 28, 2026)

Low legal awareness and legal culture . People tend to be less concerned about spatial planning violations or environmental damage as long as they don't directly impact their lives. As a result, practices that actually violate regulations, such as building on river banks, are often considered normal and continue without strong social oversight from the surrounding community.³⁸

Based on an interview with Umi Lanisti, a resident of Karangtowo Village, the low level of public awareness of environmental conditions, particularly the Pelayaran River riparian zone, is influenced by changes in community social patterns. According to her, most people are currently preoccupied with work and efforts to meet family economic needs, thus having limited time to participate in social

³⁷ Sekar Sari. (2025, July 4).” Normalization of the Demak Pelayaran River is Considered a Solution to Overcome Flooding” <https://Lingkarjateng.Id/Normalisasi-Sungai-Pelayaran-Demak-Dinilai-Jadi-Solusi-Atasi-Banjir/>

³⁸ Anggraini, LR (2024). River Boundary Line Analysis (Case Study Along Pesanggrahan River, West Java) Meruyung Village, Limo District, Depok City, West Java). Umpak: Journal of Architecture and the Environment Guidance, 7(2), 10-18.

activities or protect the surrounding environment. Even on holidays, some people continue to work, resulting in a decline in social interaction and the spirit of mutual cooperation. This condition has resulted in the emergence of individualistic attitudes, where people tend to prioritize personal interests and are less concerned with environmental issues as long as they do not directly impact them. Therefore, she believes that an active role is needed from the village government, especially the RT head, hamlet head, and village head, to revive the culture of mutual cooperation and increase public awareness of the importance of protecting the river riparian zone (Umi Lanisti, Karangtowo Village Community, interview, March 5, 2026).³⁹

In addition to public awareness, the implementation of building control in the Pelayaran River border area is also influenced by priority considerations in law enforcement. Based on the results of an interview with Mr. Subakir, Head of the Welfare Section of the Karangtowo Village Government, in practice, control measures against buildings in the river border area are more often carried out when the building or activities taking place therein cause violations of public order, social norms, or acts that are contrary to the law, such as the sale of alcoholic beverages or other crimes. According to him, as long as there are no conditions that are considered urgent or cause disturbances to public order, building demolition is generally not a priority for the authorized agencies (Mr. Subakir, Head of the Welfare

³⁹ Umi Lanisti.(2017.3 March).” *Protecting the River, Protecting the Identity of Demak City.*”
<https://umilanisti.blogspot.com/2017/03/menjaga-sungai-menjaga-identitas-kota.html>

Section of the Karangtowo Village Government, interview, April 28, 2026).

Sanctions against river boundary violators must be humanitarian, as the impact could be the loss of livelihoods for communities dependent on the sector. Therefore, the implementation of Ministerial Regulation No. 28 of 2015 concerning the Determination of River and Lake Boundary Lines will be weakened and ineffective if it relies solely on warnings without firm law enforcement action against violators, as this will become a culture that will continue to go unnoticed by the community itself.⁴⁰

⁴⁰ Steven, Donny, Paul Turnip, Abdul Wahid Hasyim, Johannes Parlindungan, Department of Urban and Regional Planning. Control of Spatial Utilization in River Boundary Areas (Case Study): Brantas River Boundary, Lowokwaru District, Malang City). Vol. 11. No. 3. 2022.

DAFTAR PERUSAHAAN WILAYAH KECAMATAN KARANGTENGAH KABUPATEN DEMAK		
No.	NAMA PERUSAHAAN	ALAMAT PERUSAHAAN
1.	GLORY INDUSTRIAL SEMARANG	Jl.Semarang - Demak Km 18, Desa Dukun, Karang Tengah
2.	BUWEI TANNERY INDONESIA, PT	Kawasan Jips Blok C1-C, Karang Tengah
3.	COSPA HANDBAG GROUP, PT	Kawasan Industri Jatengland Industrial Park Sayung, Karang Tengah
4.	FOREVER YOUNG INTERNASIONAL, PT	PT Kawasan Jips Blok H1, Karang Tengah
5.	INDONESIA LOYAL ART, PT	Kawasan Industri Jatengland Blok C 1 A, Blok Batu,, Karang Tengah
6.	ARTHA KAYU INDONESIA, PT	Jl. Semarang - Demak Km. 15,5, Karang Tengah
7.	KARYA CIPTA UNGGUL NUSANTARA, PT	Jl. Raya Smg Demak Km.16 Batu Karangtengah, Demak, Karang Tengah
8.	BAHANA BUANA BOX, PT	Jl. Raya Semarang - Demak Km. 16, Desa Batu, Karang Tengah, Karang Tengah
9.	MAKUKU CARE INDONESIA, PT	Jateng Land Industrial Park Sayung Blok F No. 1, Karang Tengah
10.	PURINUSA EKA PERSADA, PT	Jl. Raya Semarang Demak Km 17, Karang Tengah
11.	WANA INDAH ASRI, PT	Jl. Semarang - Demak Km. 18, Perbalan, Dukun, Karang Tengah
12.	RECKIT BENCKISER, PT	Jl. Raya Semarang-Demak Km 15, Karang Tengah
13.	SUBALI MAKMUR, PT	Jl. Raya Batu Km. 16 Karang Tengah, Karang Tengah
14.	LESSO TECHNOLOGY INDONESIA, PT	Jatengland Industrial Park Sayung, Blok D, Batu Krajan, Batu, Karang Tengah
15.	LIPUTRA ISTANA TEKNOLOGI, PT	Kawasan Industri Jatengland Industrial Park Sayung Blok C1B, Jalan Raya Semarang - Demak Km 14,7, Karang Tengah
16.	MAJU SUKSES PLASTINDO, PT	Jl. Raya Semarang - Demak Km. 16, Karang Tengah
17.	TINS JAYA ABADI, PT	Kawasan Industri Jatengland Industrial Park Sayung Blok C1B, Jalan Raya Semarang - Demak Km 14,7, Karang Tengah
18.	INDO KARYA BETON, PT	Jl.Semarang - Demak Km 16.5 Kel. Batu Kec. Karangtengah, Kec. Demak, Kabupaten Demak, Jawa Tengah, Karang Tengah
19.	NUSANTARA BUILDING INDUSTRIES, PT	Jl. Raya Semarang - Demak Km. 17, Karang Tengah
20.	STRUKTUR BAJA RINGAN INDONESIA, PT	Jips Blok E2 Jl. Raya Semarang Demak, Km 14.7, Karang Tengah

Figure 11. List of Medium and Large Manufacturing Industries in KarangTengah District 2025

Source: Central Statistics Agency of Demak Regency

The development of the industrial sector in Demak Regency has had a significant impact on increasing the economic activity of the community. The existence of various industrial areas not only creates jobs for local residents but also encourages the growth of various supporting economic activities around the industrial areas. One form of this activity is the development of trade and service businesses aimed at meeting the needs of industrial workers. Based on data obtained from the Central Statistics Agency of Demak Regency in the form of a list of medium and large

manufacturing industries in the Karangtengah sub-district area from 2025 to its current development, it shows that PT. Glory is one of the industries that has an influence on economic development in the Karangtengah sub-district area which directly faces the Pelayaran River in Karangtowo Village.⁴¹

Based on the results of an interview conducted on April 11, 2026, with the Karangtowo Village community, the presence of the PT Glory Industrial garment industry located near the research location is one of the factors driving the development of economic activity in the Karangtowo Village area. The increasing number of workers each year creates business opportunities that are utilized by the community to open food stalls, grocery stores, fruit and vegetable stalls, motorcycle parking areas, and various micro, small, and medium enterprises (MSMEs). However, the high economic value of the area also encourages some residents to utilize the Pelayaran River border area as a location for business activities, even though the area is an area whose use is restricted based on statutory provisions. This is reinforced by the results of an interview with the Public Works and Spatial Planning Agency of Demak Regency on April 14, 2026.

An interview with a street vendor on the banks of the Pelayaran River revealed that the primary reason people built semi-permanent structures in the Pelayaran River is because

⁴¹ Central Statistics Agency of Demak Regency. List of Medium and Large Manufacturing Industries in Karangtengah District. <https://Demakkab.Bps.Go.Id/Id>. 2025.

of its strategic location, adjacent to an industrial area and on the main route of the Semarang-Demak Pantura road, which makes the area a highly marketable area. Furthermore, the limited economic capacity of the community to acquire or rent land in accordance with spatial planning regulations has led some to choose to utilize the riverbank area as a place to conduct business. This option is seen as more economically advantageous, even though it does not comply with legal provisions governing spatial use.

In addition to economic factors, the low level of public understanding of the provisions regarding river boundaries also affects the level of compliance with applicable regulations. Based on the results of interviews with several traders along the Pelayaran River, the socialization of the provisions regarding river boundaries, the prohibition on building construction in the boundary area, and the legal consequences for violations has not been implemented optimally and continuously by the authorized agencies. As a result, some residents do not fully understand the legal status of the river boundary area, the limits of permitted spatial use, or the sanctions that can be imposed if buildings are constructed in the area.

Thus, the presence of semi-permanent buildings in the Pelayaran River riparian area is not only influenced by the economic factors of the community who utilize the strategic location as a source of livelihood, but also by the low level of public awareness and legal understanding regarding the function of the river riparian area. In addition, the suboptimal socialization, supervision, and coordination

between authorized agencies also contribute to the low public compliance with the provisions on spatial utilization. This condition indicates that the problem of illegal buildings in the Pelayaran River riparian area is the result of the interconnectedness of various factors, namely economic factors, community factors, law enforcement factors, and legal factors themselves as stated in Soerjono Soekanto's theory of legal effectiveness. Therefore, efforts to control illegal buildings are not sufficient through a repressive approach in the form of regulation, but also need to be balanced with preventive measures through socialization, education, increased supervision, strengthened coordination between agencies, and the consistent implementation of spatial planning policies so that the goal of protecting the river riparian area can be achieved effectively.

3. Facilities and Amenities Factors

Based on the results of research and interviews with authorized institutions, including the Pemali Juana River Basin Center, the Public Works and Spatial Planning Office of Demak Regency, and the Demak Regency Civil Service Police Unit, supporting facilities and infrastructure are important factors influencing the effectiveness of law enforcement. These supporting facilities include both software *and* hardware . In terms of software, education and training received by law enforcement officers play a crucial role.

⁴²However, the education provided so far tends to be oriented towards practical and conventional aspects, resulting in various obstacles in its implementation. One such obstacle is limited understanding of the latest legal developments, particularly those related to Ministerial Regulation No. 28 of 2015 concerning the Determination of River and Lake Boundary Lines and regulations that continue to change. This condition indicates that technically and legally, some law enforcement officers still need capacity building to be able to carry out their authority optimally. On the other hand, the broad scope of duties and responsibilities that must be carried out by law enforcement officers also poses a challenge in carrying out their duties.

Facilities and infrastructure are also obstacles to controlling illegal buildings in river boundary areas. Limited human resources at relevant agencies, such as the local government, the Pemali Juana River Basin Office, the Demak Regency Public Works and Spatial Planning Agency, and the Demak Regency Civil Service Police Unit, mean that monitoring activities cannot be carried out comprehensively and sustainably. The vast area to be monitored is not commensurate with the number of officers available, resulting in many violations that go unnoticed. Disciplining residents requires a persuasive approach. The Pemali Juana River Basin Agency (BBWS) must collaborate with the local government

⁴² Kurniawan, P., Nurazizah, N., Satria, J., Kurniati, E., & Setyanto, AR (2024). The Function of Spatial Planning in Maintaining the Environmental Sustainability of Bandar Lampung City. *Intelek Insan Cendikia Journal*, 1(10), Hal: 7904-7915.

to relocate residents and street vendors, which requires careful planning regarding new housing.

In addition to limited human resources, budget constraints also impact the effectiveness of monitoring and enforcement. Illegal building control activities require significant costs, from data collection and outreach, field supervision, and enforcement. If budgetary support is inadequate, monitoring intensity decreases and enforcement measures cannot be implemented routinely. As a result, existing illegal buildings tend to remain standing, and their numbers may even increase over time.⁴³

These limitations are often exacerbated by the perception that local law enforcement agencies, such as the Public Order Agency (Satpol PP), receive less attention than other regional agencies. Consequently, the support and capacity building they receive are inadequate. This situation means that Satpol PP's duties and functions in enforcing local regulations have not been fully implemented as expected.⁴⁴

The lack of supporting facilities, such as mapping equipment, operational vehicles, and adequate monitoring information systems, can also hinder effective control. Therefore, increasing human resource capacity, adequate budgetary support, and providing supporting facilities are

⁴³ Arief Fahmi Lubis. (2024). The Function of Law as a Means of Social Control in Society in the Context of Realizing National Resilience. *Waradin Community Service Journal*, 2(3), 44–50. <https://doi.org/10.56910/wrd.v2i3.372>

⁴⁴ Steven, Donny, Paul Turnip, Abdul Wahid Hasyim, Johannes Parlindungan, Planning Department, And Regions and Cities. Controlling Spatial Utilization in River Boundary Areas (Case Study): Brantas River Boundary, Lowokwaru District, Malang City). Vol. 11. No. 3. 2022. Pages: 29-35.

crucial factors in achieving optimal control of illegal structures in the Pelayaran River boundary area.

The limited budget for compensation for buildings along riverbanks presents a unique obstacle to the eviction process. Compensation must adhere to normative provisions while also considering the actual conditions of the community. While it is believed that demolition must be accompanied by adequate relocation, the legal status of riverbank land as state land makes it non-reimbursable, even if it has been used by the community for a long time.⁴⁵

So these limitations have resulted in the implementation of Ministerial Regulation Number 28 of 2015 concerning the Determination of River and Lake Boundary Lines not running properly in the Pelayaran River area of Karangtowo Village, Karangtengah District, Demak Regency.

Conclusion

Legal control efforts against illegal buildings in the Pelayaran River border area in Karangtowo Village based on the Minister of Public Works and Housing Regulation Number 28/PRT/M/2015 have not been implemented optimally. Although the government and related agencies have undertaken various preventive measures, such as river normalization, installation of warning signs, data collection, and supervision of the border area, conditions in the field still show the existence of permanent and semi-permanent

⁴⁵ Wahyuni, W., Sadino, S., & Shebubakar, AN (2025). Legal Risks of Compensation in Land Acquisition Implementation in Border Areas: A Legal Approach for Implementing Officials. *Binamulia Hukum*, 14(2), pp.343-360.

buildings used as business premises and for community economic activities. The existence of these buildings does not comply with the provisions of the river border line, some of the buildings even jut out into the river body, thus disrupting the function of the border area as a river protection space. These findings indicate that the implementation of the provisions of the Minister of Public Works and Housing Regulation Number 28/PRT/M/2015 still experiences a gap between the normative aspect (*das sollen*) and empirical reality (*das sein*).

The suboptimal control is influenced by several interrelated factors. From a legal and institutional perspective, supervision, coordination, and law enforcement by authorized agencies have not been carried out consistently and sustainably. From a community perspective, low legal awareness and the perception that riverbank areas can be used for business purposes encourage the continued development of illegal buildings. Furthermore, the high economic value of the area due to its proximity to the Pantura Road and industrial areas causes people to continue to use the riverbanks as trading locations. This condition is further exacerbated by the ineffective socialization of riverbank demarcation provisions and limited repressive action against violations. Therefore, stronger synergy is needed between the Pemali Juana River Basin Management Agency (BBWS), the Demak Regency Government, the Public Order Agency (Satpol PP), the Public Works and Spatial Planning Agency, village governments, and the community through increased supervision, ongoing socialization, consistent law enforcement, and integrated area planning so that the

Pelayaran River basin's function as a protected area can be realized in accordance with the objectives of the Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015.

References

- Arba, M. (2021). *Indonesian Agrarian Law*. Jakarta: Sinar Grafika.
- Alsa, B., Priyambodo, D., & Dinda, G. (2023). Implementation of Government Policies in Watershed Management as a Result of Land Use Change. *Legal Reform*, 27(1), 1–11.
- Ali, Z. (2013). *Metode Penelitian Hukum*. Jakarta: Sinar Grafika.
- Anggraini, L. R. (2024). River Boundary Line Analysis (Case Study Along Pesanggrahan River, Meruyung Village, Limo District, Depok City, West Java). *Umpak: Journal of Architecture and Built Environment*, 7(2), 10–18.
- Badan Pusat Statistik Kabupaten Demak. (2025). *Direktori Industri Besar dan Sedang Kabupaten Demak Tahun 2025*.
- Bambang Sunggono. (2006). *Metodologi Penelitian Hukum*. Jakarta: PT RajaGrafindo Persada.
- Demak Regency Regional Regulation Number 1 of 2020 concerning Amendments to Demak Regency Regional Regulation Number 6 of 2011 concerning Demak Regency Spatial Planning for 2011–2031.

- Demak Regent Regulation Number 22 of 2019 concerning Amendments to Demak Regent Regulation Number 24 of 2012 concerning Standard Operating Procedures for the Demak Regency Civil Service Police Unit.
- Direktorat Kementerian Pekerjaan Umum. (2025). *Rencana Strategis Balai Besar Wilayah Sungai Pemali Juana Tahun 2025–2029*.
- Fahmi Lubis, A. (2024). The Function of Law as a Means of Social Control in Society in the Context of Realizing National Resilience. *Waradin Community Service Journal*, 2(3), 44–50.
<https://doi.org/10.56910/wrd.v2i3.372>
- Farhan, N., & Amri, K. (2023). Regulation of Illegal Buildings on the Banks of the Sail River, Pekanbaru City. *Motekar: Multidisciplinary Journal of Technology and Architecture*, 1(2), 10–15.
<https://doi.org/10.57235/motekar.v1i2.1208>
- Fajar, M., & Achmad, Y. (2015). *Dualisme Penelitian Hukum Normatif dan Empiris*. Yogyakarta: Pustaka Pelajar.
- Firdaus, M. A., & Mursalin, A. (2022). The Effectiveness of River Boundary Area Regulation with the Socio-Cultural Impact of the Community in Banjarmasin City. *Banua Law Review*, 4(2), 196–203.
- Fuah, M. (2024). The Effectiveness and Function of Law in Society: A Legal Philosophy Perspective. *Desiderata Law Review*, 1(2), 35–44.
<https://doi.org/10.25299/dlr.2024.19711>
- Haidar, M., & Rozak, A. M. (2024). Analysis of River Boundary Line Violations in the Wahyu Utomo Ngaliyan Housing Complex, Semarang. *Misterius*:

- Publication of Visual Communication Art and Design*, 1(4), 52–59.
- Hasni. (2010). *Hukum Penataan Ruang dan Penatagunaan Tanah dalam Konteks UUPA–UUPR–UUPLH*. Jakarta: Rajawali Pers.
- Hidayat, J. T., & Waskitaningsih, N. (2025). Analysis of Border Area Land Use and Its Control Directions: A Case Study of the Border Between the Cipakancilan River Border and the Railway Border in Kebon Pedes Village, Tanah Sareal District, Bogor City. *Locus Journal of Research and Community Service*, 4(8). <https://doi.org/10.58344/locus.v4i8.4199>
- Indonesia. Government Regulation Number 38 of 2011 concerning Rivers.
- Indonesia. Minister of Public Works and Public Housing Regulation Number 28/PRT/M/2015 concerning the Determination of River Boundary Lines and Lake Boundary Lines.
- Kementerian Pekerjaan Umum dan Perumahan Rakyat, Direktorat Jenderal Sumber Daya Air, Balai Besar Wilayah Sungai Pemali Juana. *Pengumuman Larangan Memanfaatkan Ruang Bantaran dan Sempadan Sungai*. [https://sda.pu.go.id/balai/bbwspemalijuana/files/pengumuman/Pengumuman_Larangan_Memanfaatkan_Ruang_Bantaran_Dan_Sempadan_Sungai_\(2\).pdf](https://sda.pu.go.id/balai/bbwspemalijuana/files/pengumuman/Pengumuman_Larangan_Memanfaatkan_Ruang_Bantaran_Dan_Sempadan_Sungai_(2).pdf)
- Kurniawan, P., Nurazizah, N., Satria, J., Kurniati, E., & Setyanto, A. R. (2024). The Function of Spatial Planning in Maintaining Environmental Sustainability

- in Bandar Lampung City. *Jurnal Intelek Insan Cendikia*, 1(10), 7904–7915.
- Kuswanto, H., & Nugroho, S. S. (2024). Law Enforcement Against Building Construction in River Basin Areas (DAS) (Study in Dolopo District, Madiun Regency, East Java). *Yustisia Merdeka: Jurnal Ilmiah Hukum*, 10(1), 50–58.
- Lanisti, U. (2017, March 3). *Menjaga Sungai, Menjaga Identitas Kota Demak*.
<https://umilanisti.blogspot.com/2017/03/menjaga-sungai-menjaga-identitas-kota.htm>
- Lanisti, U. (2026, January 6). *Sungai Demak dalam Himpitan Bangunan*.
<https://umilanisti.blogspot.com/2026/01/sungai-demak-dalam-himpitan-bangunan.html>
- Marzuki, P. M. (2007). *Penelitian Hukum*. Jakarta: Prenada Media Group.
- Mohd. Yusuf Dm, Putra, A. K., Hasibuan, R. Y., & Giawa, S. D. (2025). Factors Influencing Law Enforcement in Society. *Journal of Law, Humanities, and Politics*, 5(4), 30–32. <https://doi.org/10.38035/jihhp.v5i4.4234>
- Nadia Salsabila. (2025). Analysis of Government Responsibility in Enforcing River Boundary Regulations (Case Study: Bringin River Boundary, Wonosari Village, Ngaliyan District, Semarang City).
<https://doi.org/10.15294/lshr.v5i1.25036>
- Nurhayati, Y., Ifrani, I., & Said, M. Y. (2022). Law Enforcement of Illegal Buildings on the Border Lines Along the Irrigation Canals of Cianjur Regency. *Proceedings of Justicia Conference*, 1, 20–21.

- Paramesty, R., & Khair, A. (2024). Utilization of River Boundary Lines by Communities Along the Ancar River in Mataram City. *Discretionary Journal*, 3(2), 182–189.
- Putri, D. N., & Sastra, A. R. (2024). Identification of Buildings Located in the Musi River Boundary Area (Status Quo Buildings) in Palembang City. *Jurnal Tekno Global*, 13(1), 14–20.
- Safitri, N. N. (2026). Implementation of Ecological Function Regulations for Green Open Space at Alun-Alun Bung Karno as a Public Green Open Space in Semarang Regency. *Indonesian Journal of Agrarian Law*, 3(1), 898–936.
- Sari, S. (2025, July 4). *Normalisasi Sungai Pelayaran Demak Dinilai Jadi Solusi Atasi Banjir*. <https://lingkarjateng.id/normalisasi-sungai-pelayaran-demak-dinilai-jadi-solusi-atasi-banjir/>
- Sholehuddin, M. (2025). Law Enforcement Against Residential Buildings on River Boundaries by the Surabaya City Government. *Indonesian Legal Media*, 2(7), 11–17.
- Soekanto, S. (1988). *Pokok-Pokok Sosiologi Hukum*. Jakarta: PT RajaGrafindo Persada.
- Soekanto, S. (2014). *Faktor-Faktor yang Mempengaruhi Penegakan Hukum*. Jakarta: Rajawali Pers.
- Steven, D., Turnip, P., Hasyim, A. W., & Parlindungan, J. (2022). Control of Spatial Utilization in River Boundary Areas (Case Study: Brantas River Boundary, Lowokwaru District, Malang City). 11(3), 29–35.

- Sugiyono. (2010). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sundari, N., Luthfiyah, F. Z., & Rahmawati, W. (2024). The Role of Law as a Tool for Social Engineering According to Roscoe Pound. *Das Sollen: Journal of Contemporary Law and Society Studies*, 2(1), 43–44.
- Sutaryo, S. D. A. K., & Utomo, K. Y. (2023). Analysis of River Boundary Space Utilization (Case Study: Kali Bekasi River, Bekasi City). *Jurnal Edukasi Tambusai*, 7(3), 18–20.
- Wahyuni, W., Sadino, S., & Shebubakar, A. N. (2025). Legal Risks of Compensation in the Implementation of Land Acquisition in Border Areas: A Legal Approach for Implementing Officials. *Binamulia Hukum*, 14(2), 343–360.

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